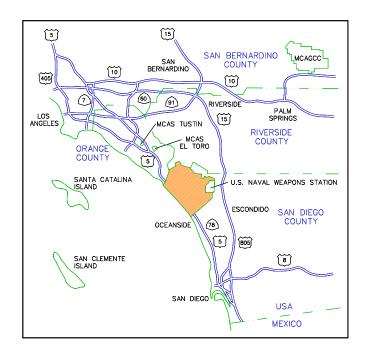
Summary Report of Remedial Action Activities at Site 1523

Marine Corps Base Camp Pendleton



Prepared for



NAVAL FACILITIES ENGINEERING SERVICE CENTER 1100 23rd Avenue Port Hueneme, California 93043

NAVFAC SOUTHWEST 1220 Pacific Highway San Diego, California 92132-5190

Contract No. N47408-01-D-8207 Task Order No. 0102

Battelle

Environmental Restoration Department 505 King Avenue Columbus, Ohio 43201-2693

September 2005

Summary Report of Remedial Action Activities at Site 1523 Marine Corps Base Camp Pendleton

Contract Number: N47408-01-D-8207 Task Order: 0102

Prepared for

Naval Facilities Engineering Service Center 1100 23rd Avenue Port Hueneme, California 93043 Naval Facilities Engineering Command Southwest 1220 Pacific Highway San Diego, California 92132-5190

Prepared by

Battelle 505 King Avenue Columbus, Ohio 43201-2693

September 23, 2005

Summary Report of Remedial Action Activities at Site 1523 Marine Corps Base Camp Pendleton

Contract Number: N47408-01-D-8207 Task Order: 0102

Prepared for:

Naval Facilities Engineering Service Center 1100 23rd Avenue Port Hueneme, California 93043 Naval Facilities Engineering Command Southwest 1220 Pacific Highway San Diego, California 92132-5190

Approved:

Christian Zimmerman
Battelle Memorial Institute
Project Manager

Approved:

Robert J. Janosy, P.G. #7346
Battelle Memorial Institute
Task Manager/Geologist

Robert J. Janosy, P.G. #7346
Battelle Memorial Institute
Task Manager/Geologist

CONTENTS

| | ATIONS AND ACRONYMS | |
|--------------|-------------------------------------------------------------------------------------------------------------------------------|---|
| EXECUTIV | E SUMMARY | V |
| Section 1.0: | INTRODUCTION | 1 |
| 1.1 | Objectives | 1 |
| 1.2 | Site Background and Location | 1 |
| | 1.2.1 Site Description. | 2 |
| | 1.2.2 Tank Removal | 2 |
| Section 2.0: | REMEDIAL ACTION ACTIVITIES | 3 |
| 2.1 | Field Implementation | 3 |
| | 2.1.1 Preparatory Activities | |
| | 2.1.2 Excavation Activities | |
| 2.2 | Analytical Results | 5 |
| 2.3 | Electronic Data Submittal | 6 |
| Section 3.0: | NATURE AND EXTENT OF CONTAMINATION | 7 |
| Section 4.0: | CONCLUSIONS | 8 |
| Section 5.0: | REFERENCES | 9 |
| APPENDIX | A: DOCUMENTATION OF REMEDIAL ACTION ACTIVITIES (on CD-ROM) | |
| | FIGURES | |
| Figure 1. | Site Assessment and Mitigation Process Flow Chart | |
| Figure 2. | Site 1523 Vicinity Map | |
| Figure 3. | Site 1523 Location Map | |
| Figure 4. | Site 1523 Historical Soil Sampling Results | |
| | Site 1523 Remedial Action Soil Sample Locations | |
| Figure 6. | Site 1523 Remedial Action Soil Sample Results | |
| Figure 7. | Three-Dimensional Block Diagrams Showing the Extent of TPH Contamination in Soils at Concentrations >500 mg/kg at Site 1523 | |
| Figure 8. | Three-Dimensional Block Diagrams Showing the Extent of TPH Contamination in Soils at Concentrations >1,000 mg/kg at Site 1523 | |
| | TADIEC | |

TABLES

- Select Soil Analytical Results from Remedial Action Activities at Site 1523 Table 1.
- TPH-Contaminated Soil Volume and Total Mass Estimates at Site 1523 Table 2.

ABBREVIATIONS AND ACRONYMS

AB Assembly Bill

AC/S ES Assistant Chief of Staff Environmental Security

bgs below ground surface

BTEX benzene, toluene, ethylbenzene, total xylenes

CAP Corrective Action Plan

CSWRCB California State Water Resources Control Board

DEH (San Diego County) Department of Environmental Health

DON (U.S.) Department of the Navy

FID flame ionization detector

IRAP Interim Remedial Action Plan

IT International Technology Corporation

LUFT leaking underground fuel tank LNAPL light, nonaqueous-phase liquid

MCB Marine Corps Base

MCL maximum contaminant level

NAVFAC Naval Facilities Engineering Command NFESC Naval Facilities Engineering Service Center

NPWC Navy Public Works Center

PAH polycyclic aromatic hydrocarbon PRG preliminary remediation goal

RPM Remedial Project Manager

RWQCB (California) Regional Water Quality Control Board

SAM Site Assessment and Mitigation

SPLP Synthetic Precipitation Leaching Procedure

SWRCB State (of California) Water Resources Control Board

TMB trimethylbenzene

TPH total petroleum hydrocarbons

TPH-D total petroleum hydrocarbons quantified as diesel total petroleum hydrocarbons quantified as gasoline TPH-MO total petroleum hydrocarbons quantified as motor oil

TRPH total recoverable petroleum hydrocarbons

UST underground storage tank

U.S. EPA United States Environmental Protection Agency

VOC volatile organic compound

Executive Summary

This Summary Report was prepared for former underground storage tank (UST) Site 1523, Marine Corps Base (MCB) Camp Pendleton. This Summary Report contains available background information and documents the remedial action activities performed at the site in July 2005.

Site 1523 is located in Area 15 on the east side of MCB Camp Pendleton and consists of Building 1523 and the area that formerly contained two USTs and associated piping. The USTs were used to store diesel fuel for heating purposes. Because of the proximity of the two tanks, the site is simply referred to as Site 1523. In September 1996, the USTs (one [1] 1,000-gallon reinforced concrete and one [1] 1,500-gallon reinforced concrete) and associated piping were removed from Site 1523 by the United States Navy Public Works Center (NPWC). Samples collected prior to and during removal of the USTs indicated that petroleum hydrocarbons had leaked from the tank, which necessitated follow-on site assessment activities.

Following the preliminary site investigation activities conducted by IT Corporation and the NPWC, Ninyo and Moore conducted an extensive site assessment to determine the lateral and vertical extent of petroleum hydrocarbons in the soil and groundwater. Based on soil sample analytical results collected during each of these events, it appears that petroleum hydrocarbon-impacted soil at Site 1523 is limited to the former tank cavity. The maximum total petroleum hydrocarbons (TPH) quantified as diesel (D) concentration that has been detected is 12,000 mg/kg, and is located in the center of the former UST excavation at approximately 10 ft below ground surface (bgs). In addition to TPH-D, the following major petroleum constituents and respective maximum concentrations were detected at Site 1523: total recoverable petroleum hydrocarbons (TRPH) [5,130 mg/kg], 1,2,4-trimethylbenzene (TMB) [1,000 mg/kg], 1,3,5-TMB (590 mg/kg), and naphthalene (1,600 mg/kg). Furthermore, leachable concentrations of 1,2,4-TMB (1.9 μ g/L), 1,3,5-TMB (1.1 μ g/L), naphthalene (17 μ g/L), and methylene chloride (42 μ g/L) are present in the former tank cavity at Site 1523.

Because both groundwater and soil are impacted at the site, the need for additional corrective action was evaluated as part of a Corrective Action Plan (CAP) submitted in October 2003 (Battelle, 2003). Of the three remedial strategies evaluated, soil excavation with additional groundwater monitoring well installation and continued groundwater monitoring was the preferred method after discussion with the San Diego Regional Water Quality Control Board (RWQCB). A finalized Interim Remedial Action Plan (IRAP) was submitted in May 2005 and outlined the planned excavation activities for Site 1523. The document was approved by the RWQCB in early July 2005. In mid-July 2005, approximately 512 yd³ of total material was excavated from the site. Post-excavation calculations have determined that approximately 97 yd³ of TPH-D contaminated soil at concentrations >1,000 mg/kg were excavated, which accounts for a 90% by volume removal. Similarly, 131 yd³ of contaminated soils at concentrations >500 mg/kg were excavated, which accounts for a 75% by volume removal. Currently, approximately 40 lb of TPH-D at concentrations >1,000 mg/kg remains in place at Site 1523, accounting for a 93% TPH-D mass removal. Similarly, approximately 99 lb of TPH-D at concentrations >500 mg/kg remains in place at Site 1523, accounting for 86% TPH-D mass removal. This report summarizes in more detail the excavation activities which took place at Site 1523.

Section 1.0: Introduction

This Summary Report was prepared for the United States Department of the Navy (DON), Naval Facilities Engineering Command (NAVFAC) Southwest under Task Order No. 0102 of Naval Facilities Engineering Service Center (NFESC) Contract No. N47408-01-D-8207. The report addresses former underground storage tank (UST) Site 1523 at Marine Corps Base (MCB) Camp Pendleton.

1.1 Objectives

The objective of this report is to summarize remedial action activities conducted at Site 1523. This site, located at MCB Camp Pendleton, is regulated under the California State Water Resources Control Board's (CSWRCB) Leaking Underground Fuel Tank (LUFT) program as administered by the CRWQCB. The document guiding the assessment, remediation, and closure process at the site is the *Site Assessment and Mitigation (SAM) Manual* (DEH, 2004). Cleanup requirements for environmental media that are contaminated as a result of these releases are specified in other regulations and guidance. Figure 1 is a flowchart that summarizes the site assessment and mitigation process in San Diego County. Site 1523 currently is in the CAP process. Based on the results from the site assessment (Ninyo and Moore, 2000) and consultations with MCB Camp Pendleton and NAVFAC Southwest, hot spot excavation of petroleum hydrocarbon-impacted soils was performed at Site 1523.

The following subsections of Section 1.0 describe the site background and location. Section 2.0 provides a summary of the remedial action activities performed in July 2005. The nature and extent of soil contamination is discussed in Section 3.0 and conclusions are presented in Section 4.0. Bibliographic data for references cited in the text are provided in Section 5.0. Appendix A contains documentation of the remedial action activities.

1.2 Site Background and Location

Site Address: Site 1523 MCB Camp Pendleton, CA 92055

Facility Name: Administration Offices

DEH Case No.: H05939-014 CRWQCB Case No.: 9UT634

Property Owner: United States Marine Corps
Tank Owner: United States Marine Corps
Tank Operator: United States Marine Corps

MCB Contact: Mr. Chet Storrs, Assistant Chief of Staff

Environmental Security (AC/S ES)

Building 22165

Camp Pendleton, CA 92055-5008

(760) 725-9774

Remedial Project Manager (RPM): Mr. Bipin Patel, NAVFAC Southwest

Code OPCE.BP 937 N. Harbor Drive

Camp Pendleton IPT, Bldg. 1, 3rd Floor

San Diego, CA 92132-5190

(619) 532-4814

Responsible Party: United States Marine Corps.

- 1.2.1 Site Description. Site 1523 is located in the 15 Area of Camp Pendleton Mainside (Figures 2 and 3). The site consists of Building 1523 and the area that formerly contained two USTs and associated piping (Figure 3). Because of the proximity of the two tanks, the site is simply referred to as Site 1523. Prior to removal, one (1) 1,000-gallon and one (1) 1,500-gallon reinforced concrete UST existed at the site. Both USTs contained diesel fuel that was used to heat Building 1523. The 1-inch supply-and-return pipelines extended laterally to the building and below ground surface (bgs).
- **1.2.2 Tank Removal.** In September 1996, the UST and associated piping were removed from Site 1523 by the United States NPWC. Excavation dimensions were approximately 12 ft by 15 ft and 7.5 ft in depth. Following UST removal, NPWC personnel collected soil samples from below the former tank and in the test pit. Samples were not collected below the former piping. Samples were analyzed for total recoverable petroleum hydrocarbons (TRPH) by United States Environmental Protection Agency (U.S. EPA) Method 418.1 and total petroleum hydrocarbons (TPH) quantified as gasoline (G) and as diesel (D) using U.S. EPA Method 8015 Modified (8015M).

Section 2.0: Remedial Action Activities

The site assessments conducted by Ninyo and Moore indicated that soil within and around the former tank cavities were contaminated with petroleum hydrocarbon constituents (Figure 4). In consultation with MCB Camp Pendleton and NAVFAC Southwest, Battelle excavated approximately 512 yd³ of total material from the former UST 1523 tank cavity and surrounding area in July 2005. Planning and implementation of the interim remedial action were conducted as outlined in the remediation work plan of the *Final Interim Remedial Action Plan for Site 1523, Marine Corps Base Camp Pendleton* (Battelle, 2005). The San Diego RWQCB concurred with the recommended corrective action of source zone excavation of TPH contaminated soils and approved the Interim Remedial Action Plan (IRAP) on July 1, 2005.

2.1 Field Implementation

Field implementation of the remedial action at Site 1523 was initiated in two phases with preparatory activities being conducted during the few weeks prior to the start of the remedial action and the actual excavation commencing the week of July 11, 2005.

- **2.1.1 Preparatory Activities.** An on-site meeting between representatives from Building 1523, AC/S ES office, and Battelle was conducted on June 29, 2005 in order to discuss the logistics of the upcoming field work. The topics of discussion included defining controlled access areas, equipment and stockpile staging areas and health and safety issues. Signs containing point of contact information were posted at Building 1523 and surrounding buildings. On July 8, 2005, subsurface utilities were located by Southwest Geophysics of San Diego, CA.
- **2.1.2 Excavation Activities.** On July 11, 2005 following a health and safety tailgate meeting, Site 1523 was readied for excavation by first removing an existing planter bed and demolishing a defunct concrete condensate tank with the use of a backhoe. EFR Environmental Inc., of Alpine, CA performed the excavation activities at Site 1523. In addition, portions of the parking lot were saw cut and the waste asphalt removed. Both the waste asphalt and concrete were stockpiled separately for later disposal at an on-base recycling facility. A portion of the clean soil from the planter bed was used to create a berm in preparation of stockpiling the contaminated soil. The remaining clean soil was stockpiled nearby for later use as clean backfill.

On July 12, 2005, soil excavation commenced following a health and safety tailgate meeting and was concentrated at the former UST tank cavity area. An excavator was used for the remainder of the soil removal effort. The upper 1.5 ft of clean overburden soil was removed and stockpiled nearby for later use as backfill material. The lithology of the clean fill was described as loose silty sands and sandy silts. Contaminated soils became evident after 1.5 ft bgs and were temporarily stockpiled separately. Air monitoring of the excavation and soils was performed using a flame ionization detector (FID) to ensure worker safety as well as the safety of those within the vicinity of Building 1523 during the field activities. When the excavation reached 2.5 ft bgs in areas that were located outside the former UST cavity, the lithology of the removed material changed to that of a mud-supported conglomerate composed of well-rounded cobbles and boulders up to 2 ft in diameter. The matrix of the conglomerate was loose and composed of silty sand and gravel and the boulder-sized clasts were predominately composed of weathered granodiorite. This geologic unit, referred to as the Lusardi Formation (Furu, 1982) was encountered before at former UST Site 1575 and is prevalent beneath most portions of the 15 Area (Battelle, 2002).

When the excavation reached a depth of 10 ft bgs, more heavily contaminated soils were encountered. It was observed that within the conglomerate, most of the contamination was present within the sandy matrix. However, the majority of the cobbles and boulders that were located within the immediate vicinity of the former UST cavity were friable and heavily weathered from the diesel impacts. TPH odors and staining were evident within many of these clasts when they were broken open. When the excavation reached a depth of 12 ft bgs (or 13 ft in few locations), the lithology changed to that of the basement complex which consisted of granodiorite. Continued digging was not possible because the excavator could not penetrate the consolidated basement rock.

At this point, approximately 300 yd³ of contaminated soil was removed and preliminary grab confirmation soil samples were collected along the sidewalls (1523-SW1 to 1523-SW7) and bottom (1523-BS1 to 1523-BS6) of the excavation (Figure 5). The purpose of collecting the preliminary confirmatory soil samples at the time was to screen the current soil concentrations and gauge how much additional soil removal was necessary. Sidewall samples were collected at 10 ft bgs where historical data had shown the more heavily concentrated contamination to exist (Figure 4). All basal samples were collected at either 12 or 13 ft bgs, depending on where refusal was encountered. All soil samples were collected through the use of the excavator bucket and initially placed within ziplock bags for the purpose of conducting headspace measurements. After the bagged samples were given an opportunity to warm up, the resulting vapors in the bags were measured using the FID. Based on the FID readings, four selected samples (1523-SW4, 1523-SW5, 1523-SW6, and 1523-SW7) were chosen and sent immediately by courier to H&P Geochemistry of Escondido, CA for 24-hour turnaround analysis of TPH-D.

Several factors enabled the excavation to proceed immediately adjacent to Building 1523 where more of the heavily contaminated residual TPH-D soil was present. The northern end of the building where the excavation was performed is constructed on a concrete slab as opposed to concrete piers and provided additional structural integrity. In addition, due to the consolidated nature of the conglomerate, the sidewalls of the excavation were vertical and not sloped, enabling the maximum amount of soil removal adjacent to the building without compromising the building.

Prior to the end of the day, all contaminated soils removed were transported to a separate staging area where the lined berm was constructed. The stockpile was tarped to prevent both organic vapors from being emitted as well as surface runoff in the event of precipitation. The open excavation was secured overnight using temporary fencing.

On July 13, 2005, following a health and safety tailgate meeting, seven trucks arrived on site to begin transporting the stockpiled contaminated soils to Candelaria Environmental of Anza, CA for disposal after waste manifests were signed. The same trucks returned later in the morning to pick up and haul away the remaining soils. Analytical results from the preliminary grab confirmation soil samples were received verbally from the laboratory during mid morning. Significantly higher TPH-D concentrations were unexpectedly reported: 4,200 mg/kg from 1523-SW4, 3,500 mg/kg from 1523-SW5, 5,000 mg/kg from 1523-SW6, and 2,000 mg/kg from 1523-SW7 (Figure 6). In response to the reported results, continued excavation proceeded along the northern sidewall where 1523-SW4 and 1523-SW5 reported elevated TPH-D concentrations. Also, additional asphalt was saw cut and removed enabling continued digging along the southern sidewall where 1523-SW6 was sampled (Figure 5). After additional soils were removed from both the northern and southern ends of the excavation, it appeared that TPH concentrations decreased based on visual observations and field screening methods. Based on these field observations and after approximately 512 yd³ of material was removed, it was decided that the goal of hot-spot removal of the bulk of heavily contaminated TPH soils was accomplished. The over-excavated soil was temporarily stockpiled and tarped until it could be disposed the following day. Copies of the waste manifest forms with weighmaster certificates are provided in Appendix A.

Prior to initiating backfilling activities, additional confirmatory grab soil samples were collected at areas that were over-excavated (sidewall samples 1523-SW8 through 1523-SW11 and basal samples 1523-BS7 and 1523-BS8) (Figure 5). All collected soil samples were processed and prepared for overnight delivery to Alpha Analytical of Sparks, NV for analyses under chain-of-custody. All collected samples with the exception of 1523-SW4, 1523-SW5, and 1523-SW6 were analyzed for TPH-D and TPH quantified as motor oil (MO). Fifty percent of the collected samples were analyzed for VOCs and twenty five percent for polynuclear aromatic hydrocarbons (PAHs). The soil samples identified for VOC and PAH analyses were selected based on field screenings measurements. Those soil samples collected on July 12, 2005 for VOC analysis using Encore samplers were frozen that night in order to increase the sample hold time. Two samples, 1523-BS8 and 1523-SW3, were selected for Synthetic Precipitation Leaching Procedure (SPLP), specifically for VOCs, based on preliminary results.

After all confirmatory soil samples were collected, a licensed soil engineer with Davis Earth Materials Inc. of San Diego, CA arrived on site to inspect the open excavation and approve it for backfilling. Backfilling activities consisted of using ¾-inch gravel to fill the excavation to 2 ft bgs which transpired most of the afternoon. After the excavation was backfilled, the open excavation was secured overnight using temporary fencing. A copy of the soils engineer field report is provided in Appendix A.

Site restoration activities were conducted from July 14-18, 2005. After the footprint of the excavation was surveyed using a hand-held Global Positioning System (GPS) unit (Trimble Geoexplorer® GeoXTTM), filter fabric was laid on top of the gravel material and the remaining 2 ft of the excavation was backfilled in 6-inch lifts with the clean stockpiled soil and subsequently compacted. Once backfilling activities concluded, the soil engineer with Davis Earth Materials Inc. returned and conducted compaction tests at random locations within the backfilled footprint. After the backfilled area passed the compaction tests, the planter beds were reconstructed and the remaining area of the parking lot was repaved with asphalt and restriped. During the site restoration activities, the remainder of the stockpiled contaminated soil was transported to Candelaria Environmental on July 14-15, 2005 after waste manifests were signed. In addition, waste concrete and asphalt were transported to 3-Mile Pit, an on-base asphalt/concrete recycling facility. Copies of the soils engineer compaction report, soil waste manifest forms with weighmaster certificates, and survey plot for the excavation footprint are provided in Appendix A.

2.2 Analytical Results

Because the H&P Geochemistry laboratory data was used for field screening purposes only, split soil sample 1523-SW7-10 was also sent to Alpha Analytical with the other confirmation soil samples. Both analytical results from H&P Geochemistry and Alpha Analytical are posted on Table 1 and Figure 6.

All confirmatory grab soil samples with the exception of 1523-SW8 and 1523-SW10 reported detectable concentrations of petroleum hydrocarbons. Maximum concentrations of TPH-D were reported from basal samples and ranged from 310 mg/kg (1523-BS2) to 2,800 mg/kg (1523-BS8). TPH-D concentrations from sidewall samples ranged from non-detectable (1523-SW8 and 1523-SW10) to 2,300 mg/kg (1523-SW3 and 1523-SW11). TPH-MO ranged from non-detectable (1523-SW8, 1523-SW9, and 1523-SW10) to 660 mg/kg (1523-BS8). Minor detections of VOCs were reported in eight of the nine analyzed samples. The maximum VOC concentration reported from all samples was 0.38 mg/kg (1,2,4-TMB), which is below the U.S. EPA Region 9 Preliminary Remediation Goal (PRG) value of 52 mg/kg. The only BTEX compounds detected were ethylbenzene and total xylenes which were both only reported from sample 1523-SW3 at concentrations of 0.062 mg/kg and 0.051 mg/kg, respectively, and are below their corresponding PRG values. No PAHs were detected above their respective reporting limits.

SPLP results only indicated that 1,2,4-trimethylbenzene and naphthalene had the potential to leach to the subsurface. Naphthalene reported leachable concentrations from samples 1523-BS8 and 1523-SW3-10 at 18 μ g/L and 19 μ g/L, respectively, which are above the PRG value of 0.93 μ g/L.

2.3 Electronic Data Submittal

In accordance with Assembly Bill (AB) 2886 (Water Code Sections 13195-13198), Battelle has completed electronic delivery format (EDF) uploads for the Site 1523 remedial action sampling via the Internet to the State of California Water Resources Control Board (SWRCB) GeoTracker System. These submissions included soil laboratory data.

Electronic data uploads included the following major activities:

- 1. Obtaining a unique Global Identification (ID) for each site.
- 2. Uploading a list of "Field_Point_Names" to GeoTracker.
- 3. Providing the Global ID and Field Point Names to the analytical laboratory on the chain of custody.
- 4. Ensuring that the field point names, Global ID, and all laboratory data were correct within each electronic submission file.
- 5. Submitting electronic compliance data via the GeoTracker Internet site.
- 6. Submitting an electronic copy of the pertinent report.

Because the H&P Geochemistry soil data was only used for field screening purposes, it is not formally being submitted and hence, will not be uploaded into GeoTracker. All Alpha Analytical data submittals for the 2005 remedial action soil sampling have been submitted to the GeoTracker Web site.

Section 3.0: Nature and Extent of Contamination

An initial volume estimate of approximately 741 yd³ of TPH-D-impacted soils at concentrations >1,000 mg/kg, which includes 631 yd³ of lesser contaminated overburden, was reported in the IRAP (Battelle, 2005). Based on the recent analytical results from the confirmatory grab soil samples collected during the July 12, 2005 remedial action, the nature and extent of TPH-D contamination at Site 1523 was revised and volume and mass estimates were recalculated (Table 2).

All available analytical data from soil samples collected at Site 1523 from tank removal, site assessment, and remedial action activities, were used to recalculate soil volume and mass estimates, which only changed slightly from the original values. A pre-excavation volume of TPH-D contaminated soils at concentrations >1,000 mg/kg was originally calculated to be 110 yd³ and revised to 107.5 yd³. Similarly, for concentrations >500 mg/kg, an original estimate of 168 yd³ was calculated and revised to 175 yd³. Mass estimate values were also revised and only changed slightly from what was calculated earlier. A mass of 610 lb was recalculated for TPH-D concentrations >1,000 mg/kg, a change from the earlier estimate of 630 lb. For concentrations >500 mg/kg, the recalculated mass of 730 lb of TPH-D was about the same as previously estimated (733 lb).

Post-excavation calculations have determined that approximately 97 yd³ of TPH-D contaminated soil at concentrations >1,000 mg/kg was excavated which accounts for a 90% by volume removal. Similarly, 131 yd³ of contaminated soils at concentrations >500 mg/kg was excavated which accounts for a 75% by volume removal. Currently, approximately 40 lb of TPH-D at concentrations >1,000 mg/kg remains in place at Site 1523, accounting for a 93% TPH-D mass removal. Similarly, approximately 99 lb of TPH-D at concentrations >500 mg/kg remains in place at Site 1523, accounting for 86% TPH-D mass removal. After soil volume and mass estimates were recalculated, three-dimensional (3-D) diagrams were generated with Earthvision® showing the extent of TPH-D contamination before and after excavation activities for concentrations >500 mg/kg and >1,000 mg/kg (Figures 8 and 9, respectively). A 3-D visualization of the current (post-excavation) extent of residual TPH-D-impacted soil depicts that the bulk of soil contamination at concentrations >1,000 mg/kg was removed, particularly in the lateral direction.

Section 4.0: Conclusions

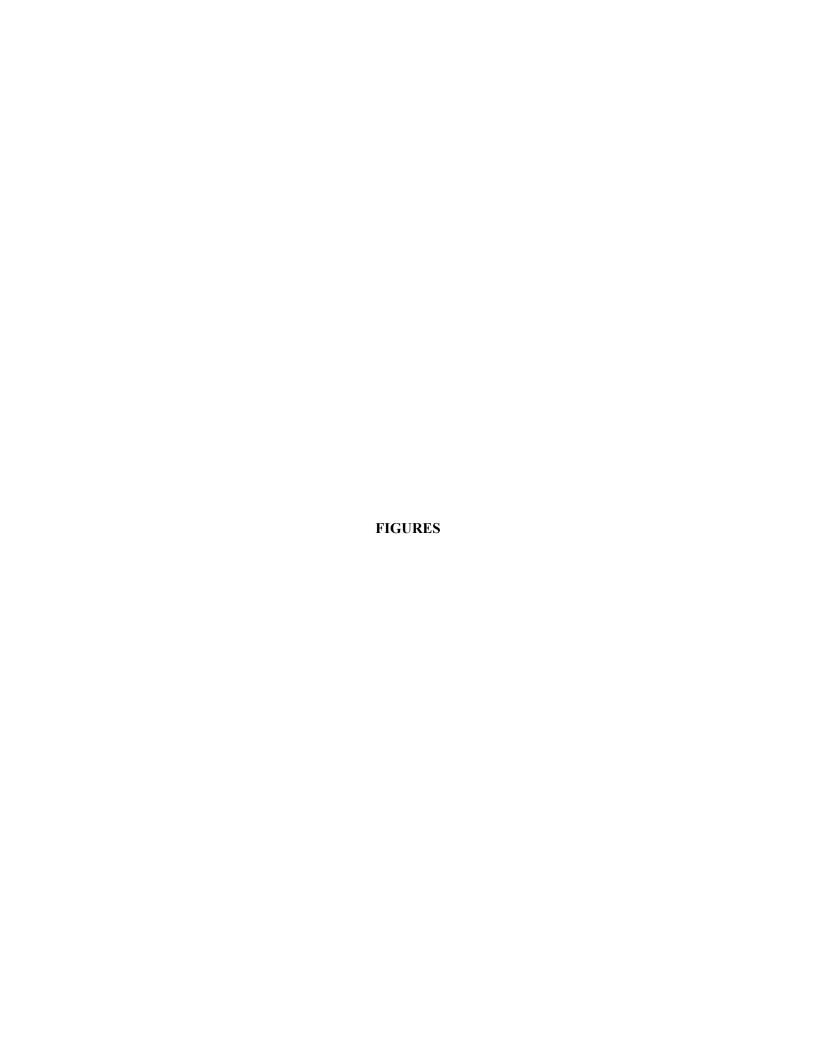
Site 1523 is currently in the corrective action phase of site mitigation. Source zone removal of TPH-D contaminated soils was conducted at Site 1523 as outlined in the *Final Interim Remedial Action Plan for Site 1523, Marine Corps Base Camp Pendleton* (Battelle, 2005). The San Diego RWQCB approved the IRAP in July 2005 via email. Excavation activities were implemented soon afterwards in mid July 2005 and approximately 512 yd³ of material which includes TPH-D impacted soils was excavated.

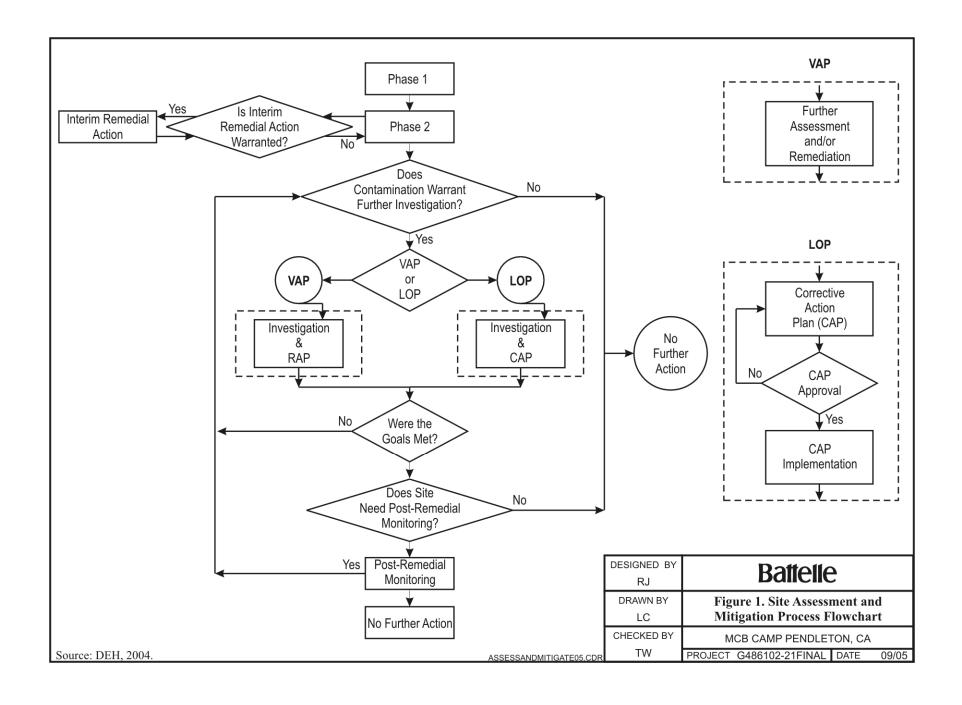
TPH-D impacted soil volume and mass estimates documented in the *Final IRAP for Site 1523* were accurate. Remedial action activities at Site 1523 were successful in executing the planned objective to remove the bulk of heavily contaminated soils. Approximately 90% volume of TPH-D contaminated soil at concentrations >1,000 mg/kg was removed, which corresponds to 93% TPH-D mass removed.

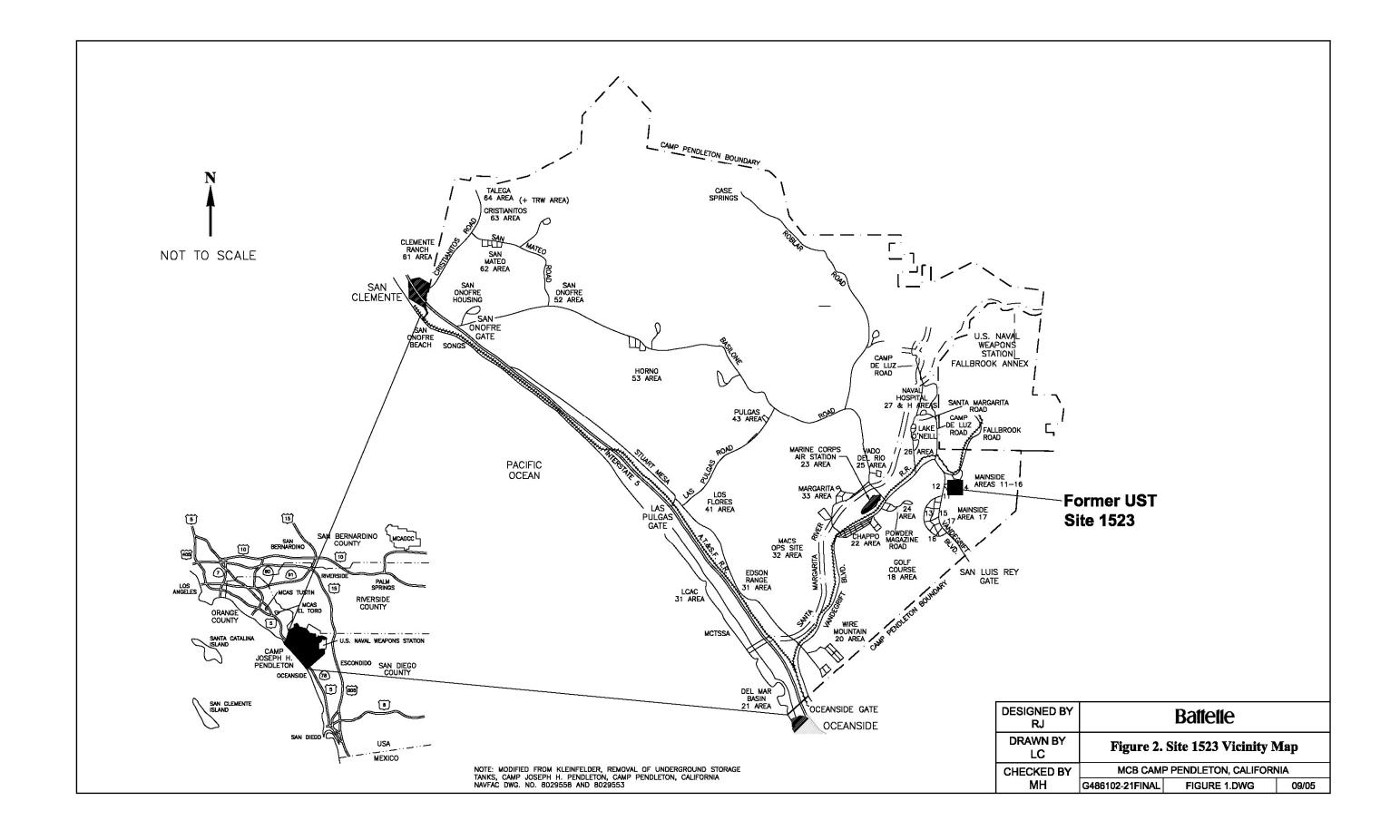
Additional groundwater monitoring well installation and monitoring was also part of the planned corrective action at the site following excavation activities. Additional wells are to be installed in September 2005 and continued groundwater monitoring will be conducted to capture the 4th quarter 2005 and 1st quarter 2006 sampling events.

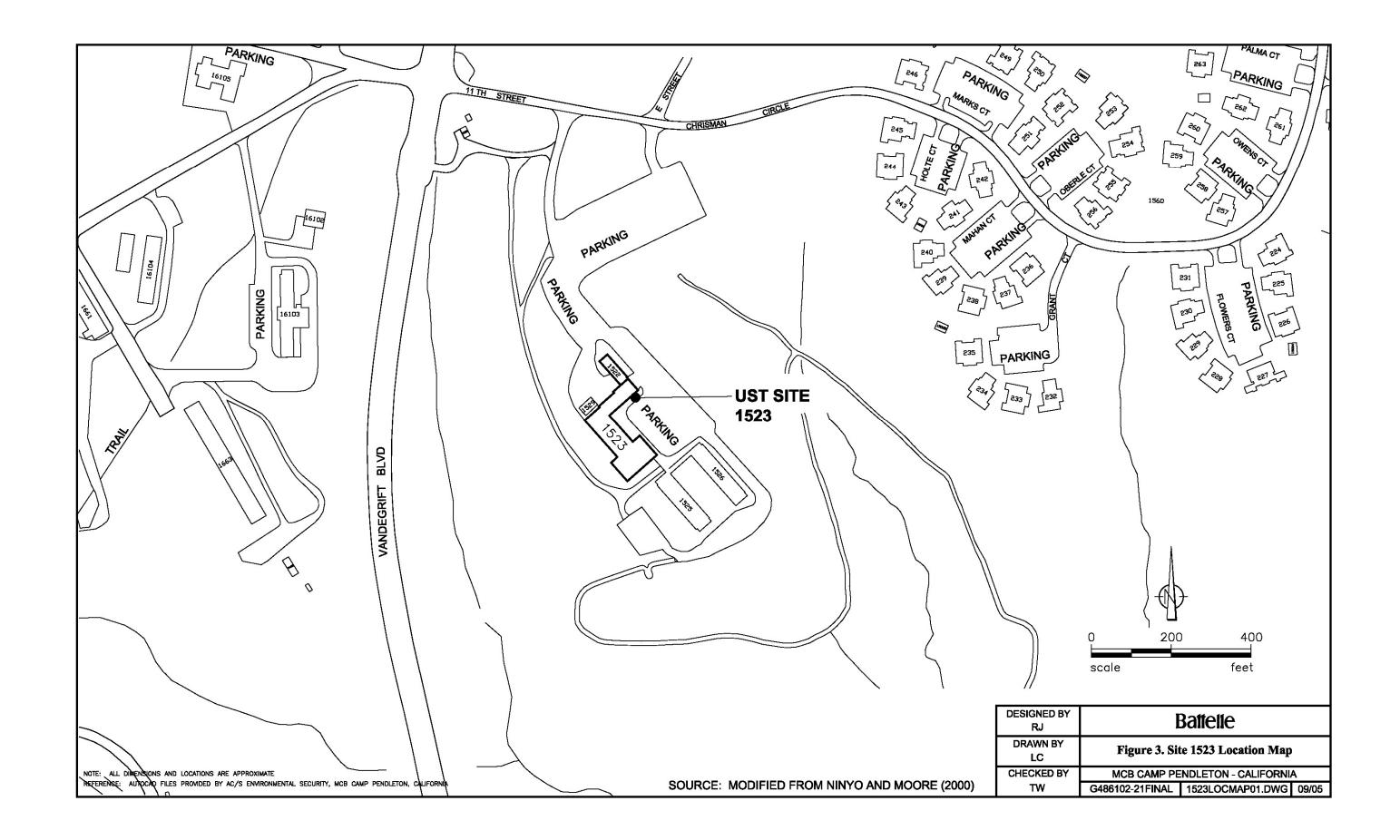
Section 5.0: References

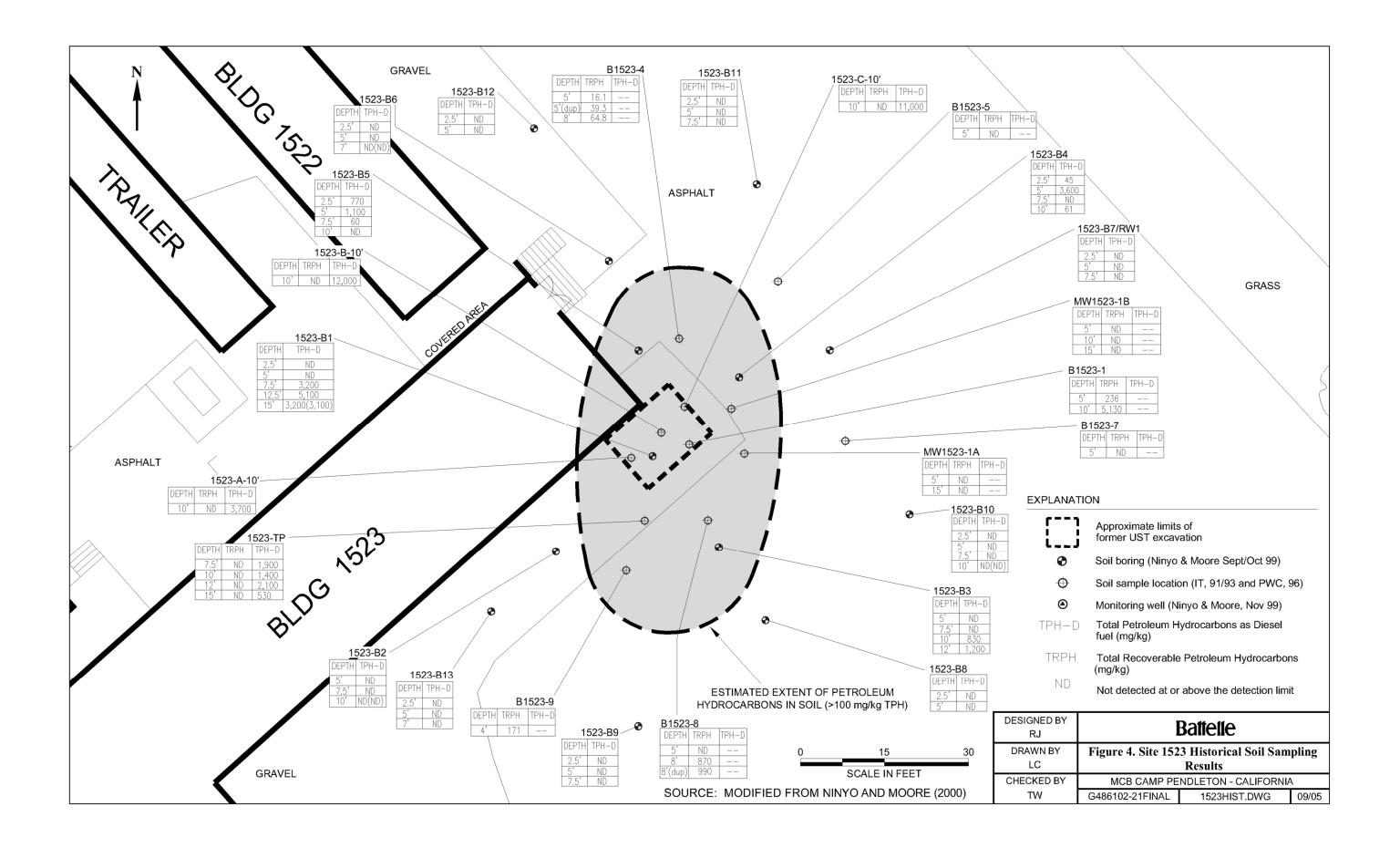
- Battelle. 2002. Revised Final Corrective Action Plan for Site 1575 (Includes: Documentation of Interim Remedial Action Activities), Marine Corps Base Camp Pendleton. Prepared for Naval Facilities Engineering Command, San Diego, California. October.
- Battelle. 2005. Final Interim Remedial Action Plan for Site 1523, Marine Corps Base Camp Pendleton. Prepared for Naval Facilities Engineering Command, San Diego, California. May.
- California Regional Water Quality Control Board. 1989. Leaking Underground Fuel Tank Field Manual: Guidelines for Site Assessment, Cleanup, and Underground Storage Tank Closure. Issued by the Leaking Underground Fuel Tank Force. October.
- DEH, see San Diego County Department of Environmental Health.
- Furu, E.J. 1982. Sedimentary Geology of a Portion of Southern Camp Pendleton. Unpublished Master's Thesis, San Diego State University.
- Ninyo and Moore. 2000. Environmental Site Assessment Report for UST Site 1523, Marine Corps Base Camp Pendleton, San Diego County, California. Prepared for Naval Facilities Engineering Command, San Diego, California. March.
- RWQCB, see California Regional Water Quality Control Board.
- San Diego County Department of Environmental Health. 2004. Site Assessment and Mitigation (SAM) Manual. San Diego, California.

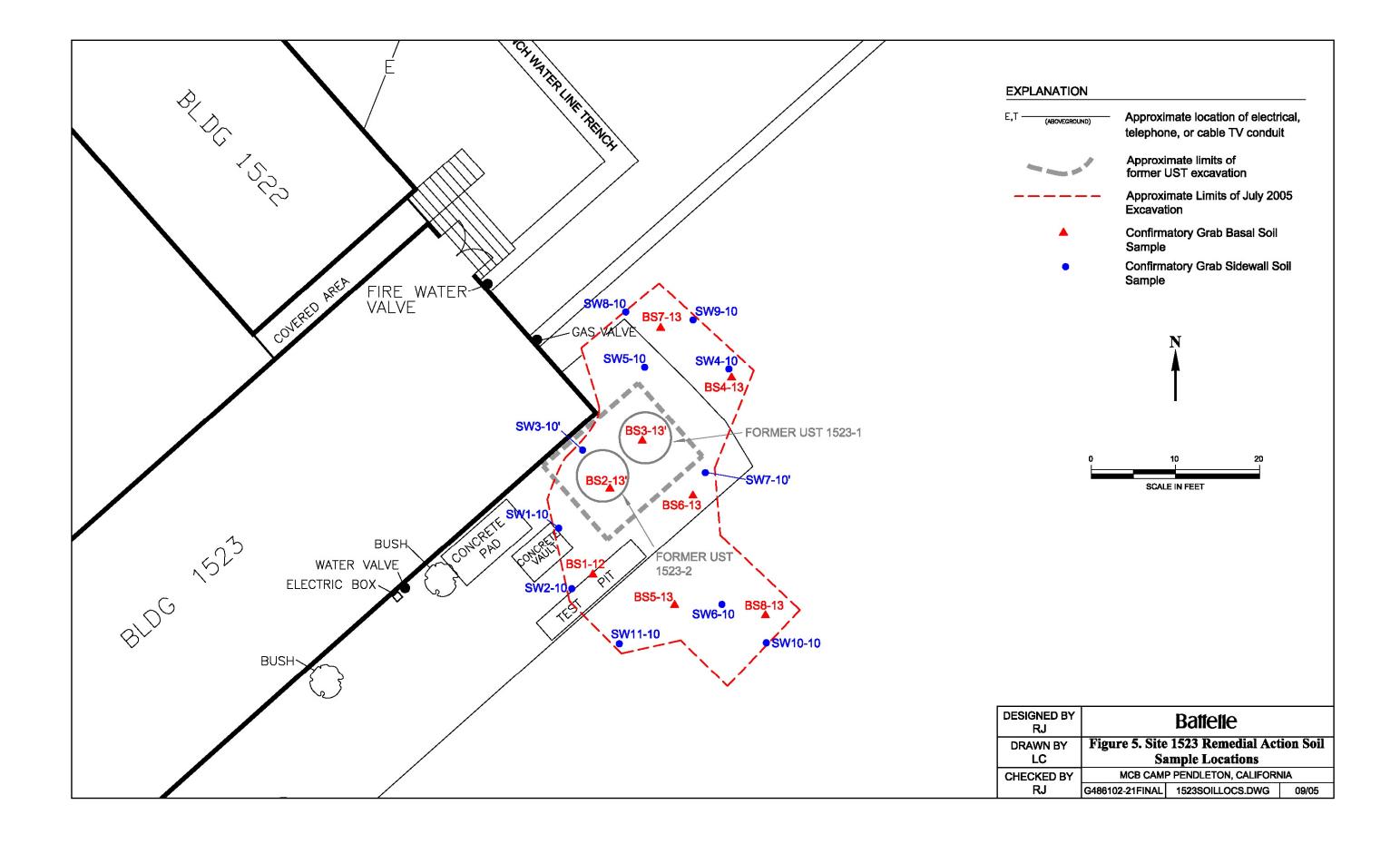


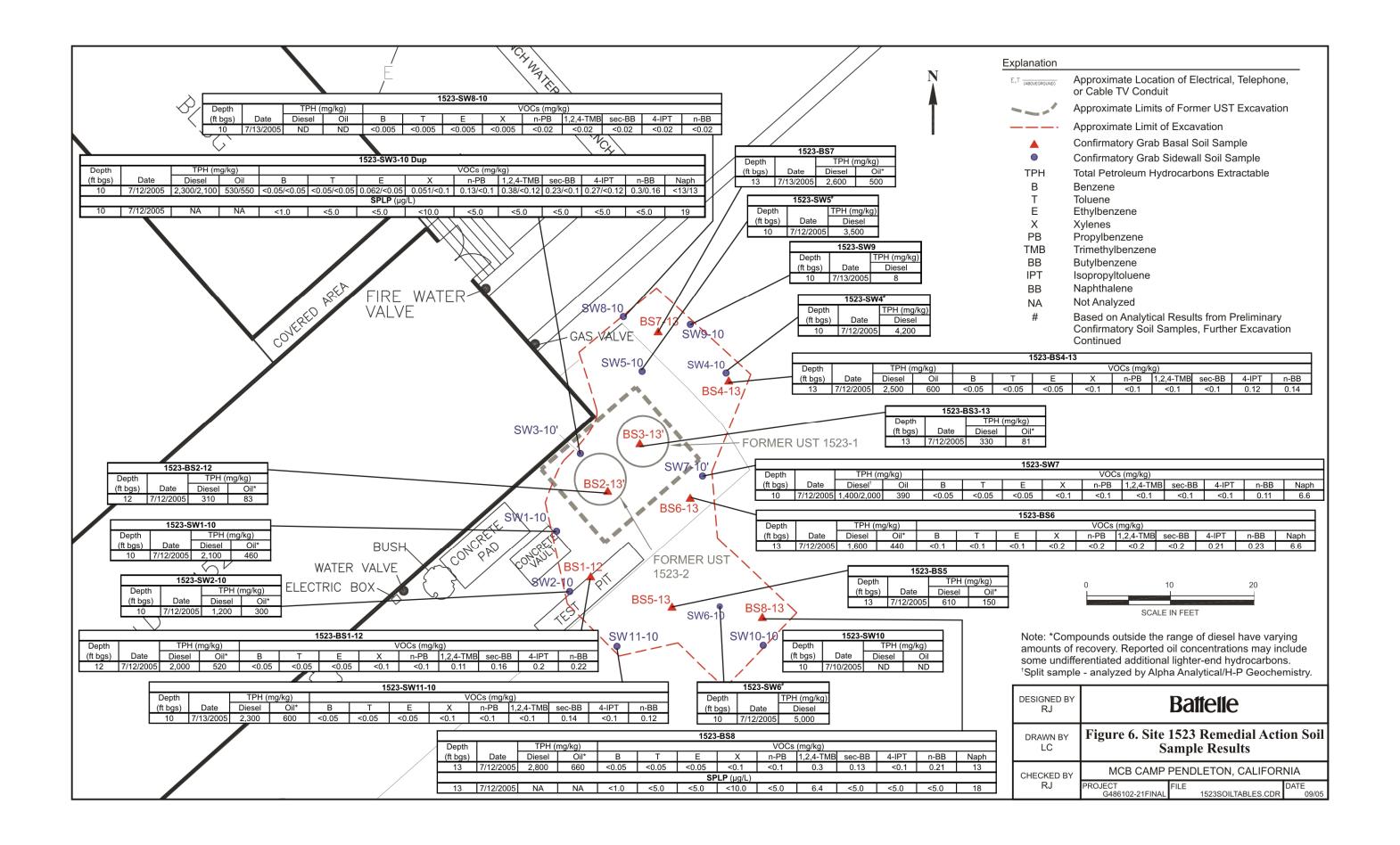


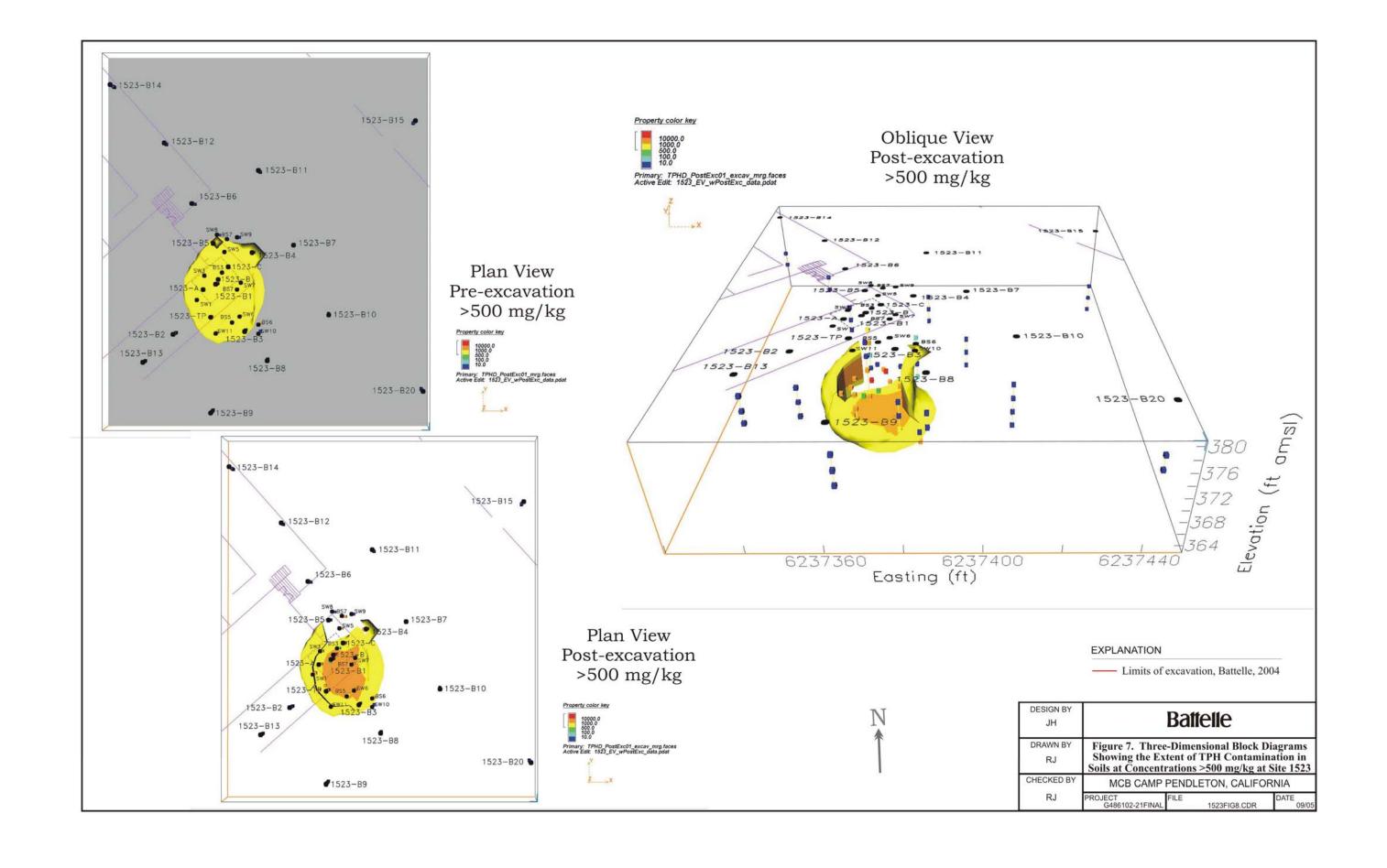


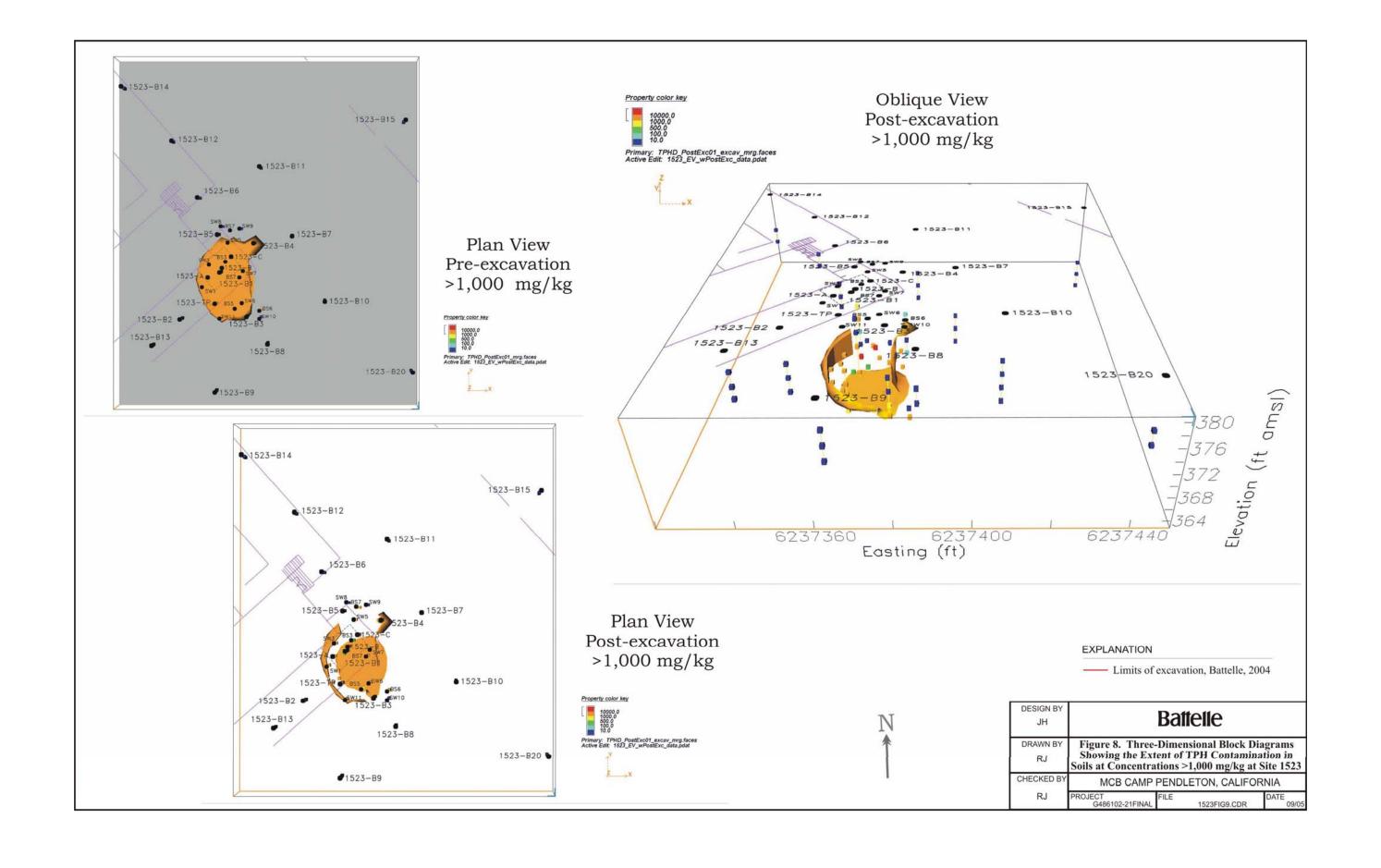












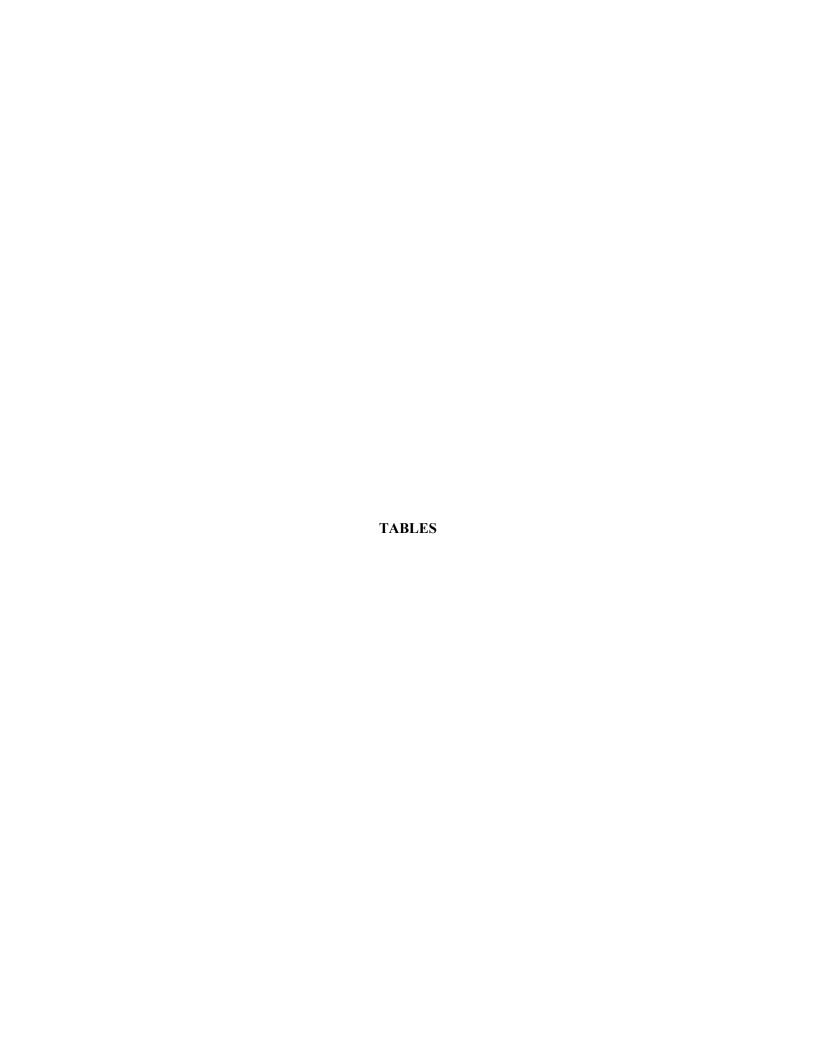


Table 1. Soil Analytical Results from Remedial Action Activities at Site 1523

| Sample In | Sample Information TPH Extractable (mg/kg) | | | | | VOCs (mg/kg) | | | | | | | | |
|-----------------|--------------------------------------------|-----------|--------|-------|-----------|----------------------|---------------|---------------|-----------------|------------------------|------------------|--------------------|----------------|-------------|
| ID | Depth (ft bgs) | Date | Diesel | Oil * | Benzene | Toluene | Ethylbenzene | Total Xylenes | n-Propylbenzene | 1,2,4-Trimethylbenzene | sec-Butylbenzene | 4-Isopropyltoluene | n-Butylbenzene | Naphthalene |
| | | | | | | H&P Geoch | emistry Resu | ılts | | | | | | |
| 1523-SW4 | 10 | 7/12/2005 | 4200 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1523-SW5 | 10 | 7/12/2005 | 3500 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1523-SW6 | 10 | 7/12/2005 | 5000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1523-SW7 | 10 | 7/12/2005 | 2000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | | | | | | Alpha Ana | lytical Resul | ts | | | | | | |
| 1523-SW1-10 | 10 | 7/12/2005 | 2100 | 460 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1523-SW2-10 | 10 | 7/12/2005 | 1200 | 300 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1523-SW3-10 | 10 | 7/12/2005 | 2300 | 530 | ND(0.05) | ND(0.05) | 0.062 | 0.051 | 0.13 | 0.38 | 0.23 | 0.27 | 0.3 | ND(13) |
| 1523-SW3-10 DUP | 10 | 7/12/2005 | 2100 | 550 | ND(0.05) | ND(0.05) | ND(0.05) | ND(0.1) | ND(0.1) | 0.12 | 0.1 | 0.12 | 0.16 | ND(13) |
| 1523-SW7 | 10 | 7/12/2005 | 1400 | 390 | ND(0.05) | ND(0.05) | ND(0.05) | ND(0.1) | ND(0.1) | ND(0.1) | ND(0.1) | ND(0.1) | 0.11 | ND(6.6) |
| 1523-SW8-10 | 10 | 7/13/2005 | ND | ND | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.01) | ND(0.02) | ND(0.02) | ND(0.02) | ND(0.02) | ND(0.02) | NA |
| 1523-SW9 | 10 | 7/13/2005 | 7.8 | ND | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1523-SW10 | 10 | 7/13/2005 | ND | ND | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1523-SW11-10 | 10 | 7/13/2005 | 2300 | 600 | ND(0.05) | ND(0.05) | ND(0.05) | ND(0.1) | ND(0.1) | ND(0.1) | 0.14 | ND(0.1) | 0.12 | NA |
| 1523-BS1-12 | 12 | 7/12/2005 | 2000 | 520 | ND(0.05) | ND(0.05) | ND(0.05) | ND(0.1) | ND(0.1) | 0.11 | 0.16 | 0.2 | 0.22 | NA |
| 1523-BS2-12 | 12 | 7/12/2005 | 310 | 83 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1523-BS3-13 | 13 | 7/12/2005 | 330 | 81 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1523-BS4-13 | 13 | 7/12/2005 | 2500 | 600 | ND(0.05) | ND(0.05) | ND(0.05) | ND(0.1) | ND(0.1) | ND(0.1) | ND(0.1) | 0.12 | 0.14 | NA |
| 1523-BS5 | 13 | 7/12/2005 | 610 | 150 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1523-BS6 | 13 | 7/12/2005 | 1600 | 440 | ND(0.1) | ND(0.1) | ND(0.1) | ND(0.2) | ND(0.2) | ND(0.2) | ND(0.2) | 0.21 | 0.23 | ND(6.6) |
| 1523-BS7 | 13 | 7/13/2005 | 2600 | 500 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1523-BS8 | 13 | 7/12/2005 | 2800 | 660 | ND(0.05) | ND(0.05) | ND(0.05) | ND(0.1) | ND(0.1) | 0.3 | 0.13 | 0.1 | 0.21 | ND(13) |
| | | | | | | | P (μg/L) | | | | | | | _ |
| 1523-BS8 | 13 | 7/12/2005 | NA | NA | ND(1.0) | ND(5.0) | ND(5.0) | ND(10.0) | ND(5.0) | 6.4 | ND(5.0) | ND(5.0) | ND(5.0) | 18 |
| 1523-SW3-10 | 10 | 7/12/2005 | NA | NA | ND(1.0) | ND(5.0) | ND(5.0) | ND(10.0) | ND(5.0) | ND(5.0) | ND(5.0) | ND(5.0) | ND(5.0) | 19 |

Note * Compounds outside the range of diesel have varying amounts of recovery. Reported oil concentrations may include some undifferentiated additional lighter-end hydrocarbons.

ND = Not Detected

NA = Not Analyzed

Table 2. Site 1523 TPH Contaminated Soil Volume and Total Mass Estimates

| Shell# | Minimum Concentration (mg/kg) | Maximum Concentration (mg/kg) | Concentration Used for Mass Calculation (mg/kg) | Grid Volume ^(a) (ft ³) | Contaminated Soil Volume (yds ³) | Contaminated Soil Mass ^(b) (lb) | TPH-D Mass ^(c) (lb) | | | | | | |
|----------|------------------------------------------|-------------------------------------|----------------------------------------------------------|-----------------------------------------------------|----------------------------------------------------|--------------------------------------------------|--------------------------------------|--|--|--|--|--|--|
| | Site 1523 Pre-Excavation (above bedrock) | | | | | | | | | | | | |
| 1 | 0 | 10 | 1.0 | 100,849.0 | 3735.1 | 8,815,622.0 | 8.82 | | | | | | |
| 2 | 10 | 100 | 55.0 | 27,198.0 | 1007.3 | 2,377,487.3 | 130.76 | | | | | | |
| 3 | 100 | 500 | 300.0 | 5,824.5 | 215.7 | 509,140.7 | 152.74 | | | | | | |
| 4 | 500 | 1,000 | 750.0 | 1,830.9 | 67.8 | 160,043.1 | 120.03 | | | | | | |
| 5 | 1,000 | 2,000 | 1,500.0 | 1,642.3 | 60.8 | 143,562.5 | 215.34 | | | | | | |
| 6 | 2,000 | 3,000 | 2,500.0 | 707.9 | 26.2 | 61,880.1 | 154.70 | | | | | | |
| 7 | 3,000 | 4,000 | 3,500.0 | 270.3 | 10.0 | 23,630.5 | 82.71 | | | | | | |
| 8 | 4,000 | 5,000 | 4,500.0 | 113.5 | 4.2 | 9,925.5 | 44.66 | | | | | | |
| 9 | 5,000 | 10,000 | 7,500.0 | 159.2 | 5.9 | 13,918.9 | 104.39 | | | | | | |
| 10 | 10,000 | 12,000 | 11,000.0 | 8.9 | 0.3 | 779.0 | 8.57 | | | | | | |
| | Total (>: | 1,000 mg/kg) | | 10,557.6 | 107.5 | 253,696.6 | 610.38 | | | | | | |
| | 7 | Γotal | | 138,604.5 | 5133.5 | 26,715,757.6 | 1,022.73 | | | | | | |
| | | Site 15 | 523 - Amount Re | emoved | | | | | | | | | |
| 1 | 0 | 10 | 1.0 | 2,477.0 | 91.7 | 98,196.7 | 0.22 | | | | | | |
| 2 | 10 | 100 | 55.0 | 2,004.3 | 74.2 | 79,459.0 | 9.64 | | | | | | |
| 3 | 100 | 500 | 300.0 | 1,373.6 | 50.9 | 54,452.6 | 36.02 | | | | | | |
| 4 | 500 | 1,000 | 750.0 | 936.6 | 34.7 | 37,128.9 | 61.40 | | | | | | |
| 5 | 1,000 | 2,000 | 1,500.0 | 1,394.1 | 51.6 | 55,268.5 | 182.80 | | | | | | |
| 6 | 2,000 | 3,000 | 2,500.0 | 682.4 | 25.3 | 27,051.1 | 149.12 | | | | | | |
| 7 | 3,000 | 4,000 | 3,500.0 | 264.8 | 9.8 | 10,496.1 | 81.00 | | | | | | |
| 8 | 4,000 | 5,000 | 4,500.0 | 112.7 | 4.2 | 4,468.8 | 44.34 | | | | | | |
| 9 | 5,000 | 10,000 | 7,500.0 | 158.9 | 5.9 | 6,299.8 | 104.18 | | | | | | |
| 10 | 10,000 | 12,000 | 11,000.0 | 8.9 | 0.3 | 352.6 | 8.55 | | | | | | |
| | Total (> | 1,000 mg/kg) | | 4,931.9 | 97.1 | 103,936.9 | 570.00 | | | | | | |
| (a) Caid | | Fotal | | 9,413.2 | 348.6 | | | | | | | | |

⁽a) Grid volume is from EarthVisionTM Volumetrics Module calculation.

⁽b) Contaminated soil mass is determined from multiplying contaminated soil volume by the dry bulk density value of 1400 kg/m³.

⁽c) TPHD mass is determined from multiplying contaminated soil mass by the factor of one 1,000,000th (1/1M kg/mg) of average shell concentration.

APPENDIX A DOCUMENTATION OF REMEDIAL ACTION ACTIVITIES



LABORATORY DATA CONSULTANTS, INC.

7750 El Camino Real, Suite 2L Carlsbad, CA 92009 Phone: 760/634-0437 Fax: 760/634-0439

Battelle 505 King Ave Columbus, OH 43201-2693 ATTN: Mr. Robert Janosy September 12, 2005

SUBJECT: MCB Camp Pendleton, CTO 102, Data Validation

Dear Mr. Janosy,

Enclosed are the final validation reports for the fractions listed below. This SDG was received on August 24, 2005. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project # 13928:

SDG # Fraction

BMI05071561 Volatiles, Polynuclear Aromatic Hydrocarbons, TPH as Extractables

The data validation was performed under EPA Level III and IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- USEPA, Contract Laboratory Program National Functional Guidelines for Organic Data Review, October 1999
- USEPA, Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, October 2004
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998

Please feel free to contact us if you have any questions.

Sincerely,

Erlinda T. Rauto

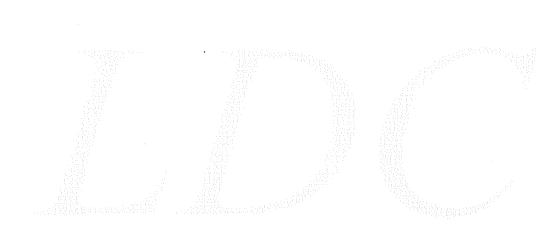
Operations Manager/Senior Chemist

37 0 ≥ 0 ဟ 0 ≥ 0 ഗ 0 ≥ 0 S 0 > 0 ഗ 0 ≷ 0 ഗ LDC #13928 (Battelle-Columbus OH / MCB Camp Pendleton, CTO 102) 0 ≥ 0 ഗ 0 ≥ 0 ဟ 0 ≥ 0 ഗ 0 ≥ 0 တ ≥ 0 0 တ Attachment 1 0 ≶ 0 ဟ 0 ≥ 0 ഗ 0 ≥ 0 S 0 ≥ 19 TPH-E (8015) S 17 > 0 0 0 7 VOA PAHS (8260B) (8270C) 2 တ N 0 > 0 0 7 8 0 0 0 08/24/05 09/15/05 08/24/05 09/15/05 (3) DATE DUE DATE REC'D BMI05071561 BMI05071561 B/LR *SDG Matrix: Water/Soil Fotal ၁၀

Shaded cells indicate Level IV validation (all other cells are Level III validation).

MCB Camp Pendleton, CTO 102 Data Validation Reports LDC# 13928

Volatiles



Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:

Camp Pendleton, CTO 102

Collection Date:

July 12 through July 13, 2005

LDC Report Date:

September 8, 2005

Matrix:

Soil

Parameters:

Volatiles

Validation Level:

EPA Level III & IV

Laboratory:

Alpha Analytical, Inc.

Sample Delivery Group (SDG): BMI05071561

Sample Identification

1523-SW3-10**

1523-SW3-10(SPLP)**

1523-SW3-10 Dup

1523-SW7

1523-SW8-10

1523-SW11-10

1523-BS1-12

1523-BS4-13

1523-BS6

1523-BS8**

1523-BS8(SPLP)**

^{**}Indicates sample underwent EPA Level IV review

Introduction

This data review covers 11 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met with the following exceptions:

| Sample | Total Days From Sample Collection Until Analysis | Required Holding Time From Sample Collection Until Analysis | Flag | A or P |
|------------------------------------------------------------------------------------------------------|-----------------------------------------------------|-------------------------------------------------------------------|-----------------------------------------|--------|
| 1523-SW3-10** 1523-SW3-10 Dup 1523-SW7 1523-BS1-12 1523-BS4-13 1523-BS6 1523-BS8** | 7 days | 48 hours | J (all detects) UJ (all non-detects) | Р |
| 1523-SW8-10 1523-SW11-10 | 6 days | 48 hours | J (all detects) UJ (all non-detects) | Р |

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990.

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all volatile target compounds were within method and validation criteria with the following exceptions:

| Date | Compound | RRF (Limits) | Associated Samples | Flag | A or P |
|---------|----------------------|---------------|-----------------------------------------------------------|-----------------------------------------|--------|
| 6/11/05 | Bromodichloromethane | 0.049 (≥0.05) | 1523-SW3-10(SPLP)** 1523-BS8(SPLP)** MBLKMS10W0727A | J (all detects) UJ (all non-detects) | A |

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

| Date | Compound | %D | Associated Samples | Flag | A or P |
|---------|------------------------------------------------------------------|----------------------|-----------------------------------------------------------|-----------------------------------------|--------|
| 7/27/05 | Bromomethane 2,2-Dichloropropane 1,1,2,2-Tetrachloroethane | 50.7 31.6 38.2 | 1523-SW3-10(SPLP)** 1523-BS8(SPLP)** MBLKMS10W0727A | J (all detects) UJ (all non-detects) | А |

All of the continuing calibration RRF values were within method and validation criteria with the following exceptions:

| Date | Compound | RRF (Limits) | Associated Samples | Flag | A or P |
|---------|----------------------|---------------|-----------------------------------------------------------|-----------------------------------------|--------|
| 7/27/05 | Bromodichloromethane | 0.040 (≥0.05) | 1523-SW3-10(SPLP)** 1523-BS8(SPLP)** MBLKMS10W0727A | J (all detects) UJ (all non-detects) | Α |

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable with the following exceptions:

| Sample | Compound | Finding | Criteria | Flag | A or P |
|-----------------------------------------------------------|-------------------|------------------------------------------------------------|----------------------------------------------------------------|------|--------|
| 1523-SW3-10(SPLP)** 1523-BS8(SPLP)** MBLKMS10W0727A | All TCL compounds | The LCS was analyzed as a continuing calibration standard. | The LCS should be analyzed independently from the calibration. | None | Р |

Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples 1523-SW3-10** and 1523-SW3-10 Dup were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

| | Concentra | tion (ug/Kg) | |
|------------------------|---------------|-----------------|-----|
| Compound | 1523-SW3-10** | 1523-SW3-10 Dup | RPD |
| Ethylbenzene | 62 | 50U | 200 |
| o-Xylene · | 51 | 50U | 200 |
| n-Propylbenzene | 130 | 100U | 200 |
| 1,2,4-Trimethylbenzene | 380 | 124 | 102 |
| sec-Butylbenzene | 230 | 100 | 79 |
| p-lsopropyltoluene | 270 | 120 | 77 |
| n-Butylbenzene | 300 | 160 | 61 |

XVII. Field Blanks

No field blanks were identified in this SDG.

Camp Pendleton, CTO 102 Volatiles - Data Qualification Summary - SDG BMI05071561

| SDG | Sample | Compound | Flag | A or P | Reason |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|-----------------------------------------|--------|---------------------------------|
| BMI05071561 | 1523-SW3-10** 1523-SW3-10 Dup 1523-SW7 1523-SW8-10 1523-SW11-10 1523-BS1-12 1523-BS4-13 1523-BS6 1523-BS8** | All TCL compounds | J (all detects) UJ (all non-detects) | Р | Technical holding times |
| BMI05071561 | 1523-SW3-10(SPLP)** 1523-B96(SPLP)** | Bromodichloromethane | J (all detects) UJ (all non-detects) | A | Initial calibration (RRF) |
| BMI05071561 | 1523-SW3-10(SPLP)** 1523-BS8(SPLP)** | Bromomethane 2,2-Dichloropropane 1,1,2,2-Tetrachloroethane | J (all detects) UJ (all non-detects) | А | Continuing calibration (%D) |
| BMI05071561 | 1523-SW3-10(SPLP)** 1523-BS8(SPLP)** | Bromodichloromethane | J (all detects) UJ (all non-detects) | А | Continuing calibration (RRF) |
| BMI05071561 | 1523-SW3-10(SPLP)** 1523-BS8(SPLP)** | All TCL compounds | None | Р | Laboratory control samples |

Camp Pendleton, CTO 102 Volatiles - Laboratory Blank Data Qualification Summary - SDG BMI05071561

No Sample Data Qualified in this SDG



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: T0102

Attn:

Bob Janosy Phone: (614) 424-7160

(614) 424-3667

Alpha Analytical Number: BMI05071561-01A

Client I.D. Number: 1523-SW3-10

Sampled: 07/12/05

Received: 07/15/05 Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

| | | | Report | ing | | | | Repor | ting |
|----|--------------------------------|---------------|--------|------------|----|------------------------------------|----------------|--------|---------|
| | Compound | Concentration | Limi | t | | Compound | Concentration | * | • |
| 1 | Dichlorodifluoromethane | ND UJ | 100 | μg/Kg | 36 | | 1 | J 50 | μg/Kg |
| 2 | Chloromethane | ND | 200 | µg/Kg | 37 | Bromoform | ND | 100 | μg/Kg |
| 3 | Vinyl chloride | ND | 100 | μg/Kg | 38 | Styrene | ND > | 100 | μg/Kg |
| 4 | Chloroethane | ND | 100 | μg/Kg | 39 | o-Xylene | 51 - | 50 | μg/Kg |
| 5 | Bromomethane | ND | 400 | µg/Kg | 40 | 1,1,2,2-Tetrachloroethane | | J 100 | µg/Kg |
| 6 | Trichlorofluoromethane | ND | 100 | μg/Kg | 41 | 1,2,3-Trichloropropane | ND / | 400 | μg/Kg |
| 7 | 1,1-Dichloroethene | ND | 100 | μg/Kg | 42 | Isopropylbenzene | ND | 100 | µg/Kg |
| 8 | Dichloromethane | ND | 400 | μg/Kg | 43 | Bromobenzene | ND \ | 100 | μg/Kg |
| 9 | trans-1,2-Dichloroethene | ND | 100 | μg/Kg | 44 | n-Propylbenzene | 130 | 3 100 | |
| 10 | Methyl tert-butyl ether (MTBE) | ND | 50 | μg/Kg | 45 | 4-Chlorotoluene | ND U | J 100 | |
| 11 | 1,1-Dichloroethane | ND | 100 | μg/Kg | 46 | 2-Chlorotoluene | ND | 100 | |
| 12 | cis-1,2-Dichloroethene | ND | 100 | μg/Kg | 47 | 1,3,5-Trimethylbenzene | ND | 100 | |
| 13 | Bromochloromethane | ND | 100 | μg/Kg | 48 | tert-Butylbenzene | ND V | | |
| 14 | Chloroform | ND | 100 | µg/Kg | 49 | 1,2,4-Trimethylbenzene | 380 | 100 | |
| 15 | 2,2-Dichloropropane | ND | 100 | μg/Kg | 50 | sec-Butylbenzene | 380 3 230 3 | 100 | |
| 16 | 1,2-Dichloroethane | ND | 100 | μg/Kg | 51 | 1,3-Dichlorobenzene | ND M | | |
| 17 | 1,1,1-Trichloroethane | ND | 100 | μg/Kg | 52 | 1,4-Dichlorobenzene | ND U | | μg/Kg |
| 18 | 1,1-Dichloropropene | ND . | 100 | µg/Kg | 53 | 4-Isopropyitoluene | | J 100 | μg/Kg |
| 19 | Carbon tetrachloride | ND | 100 | μg/Kg | 54 | 1,2-Dichlorobenzene | ND U | | μg/Kg |
| 20 | Benzene | ND | 50 | μg/Kg | 55 | n-Butylbenzene | | J 100 | μg/Kg |
| 21 | Dibromomethane | ND | 100 | μg/Kg | 56 | 1,2-Dibromo-3-chloropropane (DBCP) | ND & | | μg/Kg |
| 22 | 1,2-Dichloropropane | ND | 100 | µg/Kg | 57 | 1.2.4-Trichlorobenzene | ND I | 400 | μα/Kα |
| 23 | Trichloroethene | ND | 100 | μα/Kα | 58 | Naphthalene | ND | 1.300 | μg/Kg |
| 24 | Bromodichloromethane | ND | 100 | µg/Kg | 59 | Hexachlorobutadiene | ND | 400 | μg/Kg |
| 25 | cis-1,3-Dichloropropene | ND | 100 | µg/Kg | 60 | 1,2,3-Trichlorobenzene | ND 🗸 | 400 | µg/Kg |
| 26 | trans-1,3-Dichloropropene | ND | 100 | μg/Kg | 61 | Surr: 1,2-Dichloroethane-d4 | 93 | | %REC |
| 27 | 1,1,2-Trichloroethane | ND | 100 | μg/Kg | | Surr: Toluene-d8 | 98 | | %REC |
| 28 | Toluene | ND | 50 | µa/Ka | 63 | Surr: 4-Bromofluorobenzene | 96 | | %REC |
| 29 | 1,3-Dichloropropane | ND | 100 | μg/Kg | 30 | | . 50 | 1 | 701 ILU |
| 30 | Dibromochloromethane | ND | 100 | μg/Kg | | | | | |
| 31 | 1,2-Dibromoethane (EDB) | ND | 400 | µg/Kg | | | | | |
| 32 | Tetrachloroethene | ND | 100 | µg/Kg | | | | | |
| | 1,1,1,2-Tetrachloroethane | ND | 100 | μg/Kg | | | | | |
| | | i)/ | | F-67 - 189 | | | | | |

Reporting Limits were increased due to high concentrations of non-target analytes.

EnCore sample was not received within the 48-hour extraction holding time. Sample was extracted 3 days and 2 hours, outside of holding time, and analyzed per client request.

ND = Not Detected

34 Chlorobenzene 35 Ethylbenzene

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Report Date

Page 1 of 1



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: T0102

Alpha Analytical Number: BMI05071561-01A

Client I.D. Number: 1523-SW3-10

Attn: Bob Janosy

Phone: (614) 424-7160

x: (614) 424-3667

Sampled: 07/12/05 Received: 07/15/05 Analyzed: 07/27/05

Volatile Organics by GC/MS EPA Method SW1312 / SW8260B

| | | | Reporting | | | | Reporting |
|----------|------------------------------------------|---------------|-----------|------------------|------------------------------------|---------------|----------------------|
| - | Compound | Concentration | Limit | | Compound | Concentration | Limit |
| 1 | Dichlorodifluoromethane Chloromethane | ND U | 1 | g/L 36 g/L 37 | m,p-Xylene Bromoform | ND 1 | 5.0 μg/L |
| 2 | | ND | | g/L 3/ g/L 38 | Styrene | ND ND | 5.0 µg/L 5.0 µg/L |
| _ | Vinyl chloride Chloroethane | ND J | 1 | g/L 30 g/L 39 | o-Xviene | ND J | 1 |
| 4 5 | Bromomethane | DN DN | | g/L 39 g/L 40 | | ND UJ | 5.0 µg/L 5.0 µg/L |
| 6 | Trichlorofluoromethane | ND A | | /L 41 | • • • • | ND 1 | 10 µg/L |
| 7 | 1.1-Dichloroethene | ND I | | /L 42 | Isopropylbenzene | ND 4 | 5.0 μg/L |
| 8 | Dichloromethane | ND | | /L 43 | Bromobenzene | ND | 5.0 μg/L |
| 9 | trans-1.2-Dichloroethene | ND | 5.0 µg | | n-Propylbenzene | ND | 5.0 μg/L 5.0 μg/L |
| 10 | 1.1-Dichloroethane | ND ND | 5.0 µg | | 4-Chlorotoluene | ND | 5.0 µg/L |
| | 2-Butanone (MEK) | ND | 20 µg | • | 2-Chlorotoluene | ND ND | 5.0 μg/L 5.0 μg/L |
| 11 12 | cis-1.2-Dichloroethene | ND ND | 5.0 μg | | 1.3.5-Trimethylbenzene | ND | 5.0 μg/L 5.0 μg/L |
| 13 | Bromochloromethane | ND ND | 5.0 μg | | tert-Butylbenzene | ND | 5.0 μg/L 5.0 μg/L |
| 14 | Chloroform | ND J | 5.0 μg. | • | 1,2,4-Trimethylbenzene | ND | 5.0 μg/L 5.0 μg/L |
| 15 | 2.2-Dichloropropane | LN DN | 5.0 µg. | | sec-Butylbenzene | ND | 5.0 μg/L |
| 16 | 1.2-Dichloroethane | ND W | 5.0 µg. | | 1.3-Dichlorobenzene | ND | 5.0 μg/L |
| 17 | 1.1.1-Trichloroethane | ND I | 5.0 μg. | | 1.4-Dichlorobenzene | ND | 5.0 μg/L 5.0 μg/L |
| 18 | 1,1-Dichloropropene | ND ND | 5.0 µg | | 4-isopropyltoluene | ND | 5.0 μg/L 5.0 μg/L |
| 19 | Carbon tetrachloride | ND | 5.0 μg/ | | 1.2-Dichlorobenzene | ND | 5.0 μg/L 5.0 μg/L |
| 20 | Benzene | ND ND | 1.0 µg/ | | n-Butylbenzene | ND | 5.0 μg/L 5.0 μg/L |
| 21 | Dibromomethane | ND ND | 5.0 μg/ | | 1,2-Dibromo-3-chloropropane (DBCP) | | 5.0 μg/L 5.0 μg/L |
| 21 | 1.2-Dichloropropane | ND ND | 5.0 μg/ | | 1.2.4-Trichlorobenzene | ND V | 10 μg/L |
| 23 | Trichloroethene | ND | 5.0 μg/ | | Naphthalene | 19 | 10 µg/L |
| 24 | Bromodichloromethane | NDUT | 5.0 µg/ | | Hexachlorobutadiene | ND IL | 10 μg/L |
| 25 | cis-1.3-Dichloropropene | ND 1A | 5.0 µg/ | | 1.2.3-Trichlorobenzene | ND V | 10 μg/L |
| 26 | trans-1,3-Dichloropropene | ND I | 5.0 µg/ | | Surr: 1.2-Dichloroethane-d4 | 88 | %REC |
| 27 | 1,1,2-Trichloroethane | ND | 5.0 µg/ | | Surr: Toluene-d8 | 99 | %REC |
| 28 | Toluene | ND | 5.0 μg/ | | Surr: 4-Bromofluorobenzene | 92 | %REC |
| 29 | 1.3-Dichloropropane | ND \ | 5.0 µg/ | | | , 52 | ,011 C 0 |
| 30 | Dibromochloromethane | ND | 5.0 µg/ | | | | |
| 31 | 1.2-Dibromoethane (EDB) | ND | 10 µg/ | | | | |
| 32 | Tetrachloroethene | ND | 5.0 µg/ | | | | |
| 33 | 1,1,1,2-Tetrachloroethane | ND | 5.0 µg/l | | | | |
| 34 | Chlorobenzene | ND | 5.0 µg/l | | | | |
| 35 | Ethylbenzene | ND V | 5.0 μg/l | | | | |
| | | | | | | | |

This analysis was performed on an SPLP extract.

ND = Not Detected

Roger Scholl Kandy Sta

Dalta Hirihan

Roger L. Scholl. Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

7/28/05 Report Date

cepor Come

Page 1 of 1



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201 Attn:

Bob Janosy Phone: (614) 424-7160

Fax:

(614) 424-3667

Job#: T0102

Alpha Analytical Number: BMI05071561-02A

Client I.D. Number: 1523-SW3-10 DUP

Sampled: 07/12/05

Received: 07/15/05 Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

| | | | Reporting | 3 | | | | Reporting | g |
|----|--------------------------------|---------------|-----------|-------|----|------------------------------------|---------------|-----------|---------------|
| | Compound | Concentration | Limit | | | Compound | Concentration | Limit | |
| 1 | Dichlorodifluoromethane | LN DN | 100 | μg/Kg | 36 | m,p-Xylene | IN ON | 50 | μg/Kg |
| 2 | Chloromethane | ND 1 | 200 μ | ug/Kg | 37 | Bromoform | ND 1 | 100 | μg/Kg |
| 3 | Vinyl chloride | ND | 100 μ | ug/Kg | 38 | Styrene | ND | 100 | μg/Kg |
| 4 | Chloroethane | ND | 100 μ | ug/Kg | 39 | o-Xylene | ND | 50 | μg/Kg |
| 5 | Bromomethane | ND | 400 µ | ug/Kg | 40 | 1,1,2,2-Tetrachloroethane | ND | | μg/Kg |
| 6 | Trichlorofluoromethane | ND | 100 J | µg/Kg | 41 | 1,2,3-Trichloropropane | ND | 400 | µg/Kg |
| 7 | 1.1-Dichloroethene | ND | 100 L | ug/Kg | 42 | Isopropylbenzene | ND | 100 | μg/Kg |
| 8 | Dichloromethane | ND | 400 | ıg/Kg | 43 | Bromobenzene | ND | 100 | µg/Kg |
| 9 | trans-1,2-Dichloroethene | ND | 100 | ıg/Kg | 44 | n-Propylbenzene | ND | 100 | µg/Kg |
| 10 | Methyl tert-butyl ether (MTBE) | ND | 50 µ | ıg/Kg | 45 | 4-Chlorotoluene | ND | 100 | μg/Kg |
| 11 | 1.1-Dichloroethane | ND | 100 µ | ıg/Kg | 46 | 2-Chlorotoluene | ND | 100 | μg/Kg |
| 12 | cis-1,2-Dichloroethene | ND | 100 µ | ıg/Kg | 47 | 1,3,5-Trimethylbenzene | ND | 100 | μg/Kg |
| 13 | Bromochloromethane | ND | 100 | ıg/Kg | 48 | tert-Butylbenzene | ND 🐇 | 100 | μg/Kg |
| 14 | Chloroform | ND | 100 µ | ıg/Kg | 49 | 1,2,4-Trimethylbenzene | 120 🧕 | | μ g/Kg |
| 15 | 2,2-Dichloropropane | ND | 100 µ | ıg/Kg | 50 | sec-Butylbenzene | 100 🕹 | 100 (| µg/Kg |
| 16 | 1,2-Dichloroethane | ND | 100 µ | ıg/Kg | 51 | 1,3-Dichlorobenzene | ND UJ | | μg/Kg |
| 17 | 1,1,1-Trichloroethane | ND | 100 µ | ıg/Kg | 52 | 1,4-Dichlorobenzene | ND UJ | 100 μ | µg/Kg |
| 18 | 1,1-Dichloropropene | ND | 100 µ | ıg/Kg | 53 | 4-Isopropyltoluene | 120 J | 100 μ | μg/Kg |
| 19 | Carbon tetrachloride | ND | 100 µ | ıg/Kg | 54 | 1,2-Dichlorobenzene | EN DN | 100 µ | μg/Kg |
| 20 | Benzene | ND | 50 µ | ıg/Kg | 55 | n-Butylbenzene | 160 J | 100 L | μg/Kg |
| 21 | Dibromomethane | ND | 100 µ | ıg/Kg | 56 | 1,2-Dibromo-3-chloropropane (DBCP) | ND NJ | 600 L | μg/Kg |
| 22 | 1.2-Dichloropropane | ND | 100 µ | ıg/Kg | 57 | 1,2,4-Trichlorobenzene | ND | 400 L | ug/Kg |
| 23 | Trichloroethene | ND | 100 u | o/Ka | 58 | Naphthalene | ND | 900 L | ug/Kg |
| 24 | Bromodichloromethane | ND | 100 µ | ıg/Kg | 59 | Hexachlorobutadiene | ND | 400 L | µg/Kg |
| 25 | cis-1,3-Dichloropropene | ND | 100 µ | ıg/Kg | 60 | 1,2,3-Trichlorobenzene | ND 🎶 | | µg/Kg |
| 26 | trans-1,3-Dichloropropene | ND | 100 µ | ıg/Kg | 61 | Surr: 1,2-Dichloroethane-d4 | 94 | 9/ | %REC |
| 27 | 1.1,2-Trichloroethane | ND | 100 µ | ıg/Kg | 62 | Surr: Toluene-d8 | 95 | 9/ | %REC |
| 28 | Toluene | ND | 50 μ | ıg/Kg | 63 | Surr: 4-Bromofluorobenzene | 95 | 9/ | %REC |
| 29 | 1.3-Dichloropropane | ND | 100 µ | ıg/Kg | | | | | |
| 30 | Dibromochloromethane | ND | 100 µ | g/Kg | | | | | |
| 31 | 1,2-Dibromoethane (EDB) | ND | 400 µ | g/Kg | | | | | |
| 32 | Tetrachloroethene | ND | | g/Kg | | | | | |
| 33 | 1,1,1,2-Tetrachloroethane | ND | | g/Kg | | | | | |
| 34 | Chlorobenzene | ND 🖟 | | g/Kg | | | | | |
| 35 | Ethylbenzene | ND ₩ | 50 µ | g/Kg | | | | | |

Reporting Limits were increased due to high concentrations of non-target analytes.

EnCore sample was not received within the 48-hour extraction holding time. Sample was extracted 3 days and 2 hours, outside of holding time, and analyzed per client

ND = Not Detected

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

7/21/05 **Report Date**

Page 1 of 1



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: T0102

Alpha Analytical Number: BMI05071561-03A

Client I.D. Number: 1523-SW7

Attn: Bob Janosy

Phone: (614) 424-7160

Fax: (614) 424-3667

Sampled: 07/12/05 Received: 07/15/05 Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

| | | Reporting | • | | Reporting |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|--------------------------|
| Compound | Concentration | Limit | Compound | Concentration | Limit |
| Dichlorodifluoromethane | LN DN | 100 μg/Kg | 36 m,p-Xylene | LN DN | 50 μg/Kg |
| Chloromethane | ND | 200 μg/Kg | 37 Bromoform | ND \ | 100 µg/Kg |
| Vinyl chloride | ND | 100 μg/Kg | 38 Styrene | ND \ | 100 µg/Kg |
| Chloroethane | ND | 100 μg/Kg | 39 o-Xylene | ND | 50 μg/Kg |
| Bromomethane | ND . | 400 µg/Kg | 40 1,1,2,2-Tetrachloroethane | ND | 100 µg/Kg |
| Trichlorofluoromethane | ND | 100 μg/Kg | 41 1,2,3-Trichloropropane | ND | 400 μg/Kg |
| 1,1-Dichloroethene | ND | 100 μg/Kg | 42 Isopropylbenzene | ND | 100 μg/Kg |
| Dichloromethane | ND | 400 µg/Kg | 43 Bromobenzene | ND | 100 μg/Kg |
| trans-1,2-Dichloroethene | ND | 100 μg/Kg | 44 n-Propylbenzene | ND | 100 μg/Kg |
| Methyl tert-butyl ether (MTBE) | ND | 50 μg/Kg | 45 4-Chlorotoluene | ND | 100 μg/Kg |
| 1,1-Dichloroethane | ND | 100 µg/Kg | 46 2-Chlorotoluene | ND | 100 μg/Kg |
| cis-1,2-Dichloroethene | ND | 100 µg/Kg | 47 1,3,5-Trimethylbenzene | ND | 100 μg/Kg |
| Bromochloromethane | ND | 100 μg/Kg | 48 tert-Butylbenzene | ND | 100 μg/Kg |
| Chloroform | ND | 100 µg/Kg | 49 1,2,4-Trimethylbenzene | ND | 100 μg/Kg |
| 2,2-Dichloropropane | ND | 100 μg/Kg | 50 sec-Butylbenzene | ND | 100 μg/Kg |
| 1,2-Dichloroethane | ND | 100 µg/Kg | 51 1,3-Dichlorobenzene | ND | 100 μg/Kg |
| 1,1,1-Trichloroethane | ND | 100 μg/Kg | 52 1,4-Dichlorobenzene | ND | 100 μg/Kg |
| 1,1-Dichloropropene | ND . | 100 μg/Kg | 53 4-Isopropyltoluene | ND / | 100 μg/Kg |
| Carbon tetrachloride | ND | 100 µg/Kg | 54 1,2-Dichlorobenzene | ND ¥ | 100 μg/Kg |
| Benzene | ND | 50 μg/Kg | 55 n-Butylbenzene | | 100 μg/Kg |
| Dibromomethane | ND | 100 µg/Kg | 56 1,2-Dibromo-3-chloropropane (DBCP) | ND UJ | 600 μg/Kg |
| 1,2-Dichloropropane | ND | 100 μg/Kg | 57 1,2,4-Trichlorobenzene | ND | 400 µg/Kg |
| Trichloroethene | ND | 100 µg/Kg | 58 Naphthalene | ND . | 700 µg/Kg |
| Bromodichloromethane | ND | 100 μg/Kg | 59 Hexachlorobutadiene | ND | 400 µg/Kg |
| cis-1,3-Dichloropropene | | 100 μg/Kg | 60 1,2,3-Trichlorobenzene | ND 🎶 | 400 µg/Kg |
| trans-1,3-Dichloropropene | ND | 100 μg/Kg | 61 Surr: 1,2-Dichloroethane-d4 | 93 | %REC |
| 1,1,2-Trichloroethane | ND | 100 μg/Kg | 62 Surr: Toluene-d8 | 95 | %REC |
| Toluene | ND | 50 μg/Kg | 63 Surr: 4-Bromofluorobenzene | 98 | %REC |
| 1,3-Dichloropropane | ND | 100 μg/Kg | | | |
| Dibromochloromethane | ND | 100 µg/Kg | | | |
| 1,2-Dibromoethane (EDB) | ND | 400 µg/Kg | | | |
| Tetrachloroethene | ND | 100 μg/Kg | | | |
| 1,1,1,2-Tetrachloroethane | , B | 100 µg/Kg | | | |
| Chlorobenzene | ND , | 100 µg/Kg | | | |
| | Dichlorodifluoromethane Chloromethane Vinyl chloride Chloroethane Bromomethane Trichlorofluoromethane 1,1-Dichloroethene Dichloromethane trans-1,2-Dichloroethene Methyl tert-butyl ether (MTBE) 1,1-Dichloroethane cis-1,2-Dichloroethane cis-1,2-Dichloroethane Bromochloromethane Chloroform 2,2-Dichloropropane 1,2-Dichloropropane 1,1-1-Trichloroethane 1,1-1-Trichloroethane 1,1-Dichloropropene Carbon tetrachloride Benzene Dibromomethane 1,2-Dichloropropane Trichloroethene Bromodichloromethane cis-1,3-Dichloropropene trans-1,3-Dichloropropene trans-1,3-Dichloropropene 1,1,2-Trichloroethane Toluene 1,3-Dichloropropane Dibromochloromethane 1,2-Dibromochloromethane 1,2-Dibromochloromethane 1,2-Dibromochloromethane 1,2-Dibromochloromethane 1,2-Dibromochloromethane 1,2-Dibromochloromethane 1,2-Dibromochloromethane 1,2-Tetrachloroethane | Dichlorodifluoromethane Chloromethane Vinyl chloride Chloroethane Vinyl chloride Chloroethane Bromomethane Trichlorofluoromethane 1,1-Dichloroethene ND Methyl tert-butyl ether (MTBE) ND | Compound Concentration Limit Dichlorodifluoromethane ND M J 100 μg/Kg Chloromethane ND 200 μg/Kg Vinyl chloride ND 100 μg/Kg Chloroethane ND 100 μg/Kg Bromomethane ND 100 μg/Kg Trichlorofluoromethane ND 100 μg/Kg 1,1-Dichloroethene ND 100 μg/Kg Dichloromethane ND 100 μg/Kg Methyl tert-butyl ether (MTBE) ND 50 μg/Kg Methyl tert-butyl ether (MTBE) ND 100 μg/Kg Methyl tert-butyl ether (MTBE) ND 100 μg/Kg 1,1-Dichloroethane ND 100 μg/Kg 1,1-Dichloroethane ND 100 μg/Kg 1,1-Dichloroethane ND 100 μg/Kg 1,1-Trichloroethane ND 100 μg/Kg 1,1-Dichloropropene ND 100 μg/Kg Carbon tetrachloride ND 100 μg/Kg Benzene ND 100 μg/Kg Dibromomethane ND 100 μg/Kg | Compound Concentration Limit Compound | Compound Concentration |

Reporting Limits were increased due to high concentrations of non-target analytes.

EnCore sample was not received within the 48-hour extraction holding time. Sample was extracted 3 days, outside of holding time, and analyzed per client request.

ND = Not Detected

35 Ethylbenzene

loger Scholl Kandy Soulus Walter Findens

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Lus Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Page 1 of 1

17

7/21/05

Report Date



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

T0102 Job#:

Alpha Analytical Number: BMI05071561-04A

Client I.D. Number: 1523-SW8-10

Attn: **Bob Janosy**

Phone: (614) 424-7160

Fax: (614) 424-3667

Sampled: 07/13/05 Received: 07/15/05

Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

| | | | Reporti | ng | | | | Report | ing |
|----|--------------------------------|---------------|---------|-------|------|------------------------------------|---------------|--------|---------|
| | Compound | Concentration | Limit | 1 | | Compound | Concentration | Limit | t |
| 1 | Dichlorodifluoromethane | LN DN | 20 | μg/Kg | 36 | m,p-Xylene | LN ON | 5.0 | μg/Kg |
| 2 | Chloromethane | ND | 40 | μg/Kg | 37 | Bromoform | ND T | 20 | µg/Kg |
| 3 | Vinyl chloride | ND | 20 | μg/Kg | 38 | Styrene | ND | 20 | μg/Kg |
| 4 | Chloroethane | ND | 20 | μg/Kg | 39 | o-Xylene | ND | 5.0 | µg/Kg |
| 5 | Bromomethane | ND | 40 | μg/Kg | 40 | 1,1,2,2-Tetrachloroethane | ND | 20 | µg/Kg |
| 6 | Trichlorofluoromethane | ND | 20 | μg/Kg | 41 | 1,2,3-Trichloropropane | ND | 40 | μg/Kg |
| 7 | 1,1-Dichloroethene | ND | 20 | μg/Kg | 42 | Isopropylbenzene | ND | 20 | μg/Kg |
| 8 | Dichloromethane | ND | 40 | μg/Kg | 43 | Bromobenzene | ND | 20 | µg/Kg |
| 9 | trans-1,2-Dichloroethene | ND | 20 | μg/Kg | 44 | n-Propylbenzene | ND | 20 | μg/Kg |
| 10 | Methyl tert-butyl ether (MTBE) | ND | 5.0 | μg/Kg | 45 | 4-Chiorotoluene | ND | 20 | μg/Kg |
| 11 | 1,1-Dichloroethane | ND | 20 | µg/Kg | 46 | 2-Chlorotoluene | ND | 20 | ug/Kg |
| 12 | cis-1,2-Dichloroethene | ND | 20 | µg/Kg | 47 | 1,3,5-Trimethylbenzene | ND | 20 | μg/Kg |
| 13 | Bromochloromethane | ND | 20 | μg/Kg | . 48 | tert-Butylbenzene | ND | 20 | μα/Κα |
| 14 | Chloroform | ND | 20 | ug/Kg | 49 | 1.2.4-Trimethylbenzene | ND | 20 | μg/Kg |
| 15 | 2,2-Dichloropropane | ND ND | 20 | μg/Kg | 50 | sec-Butylbenzene | ND I | 20 | μg/Kg |
| 16 | 1,2-Dichloroethane | ND | 20 | μg/Kg | 51 | 1,3-Dichlorobenzene | ND | 20 | μg/Kg |
| 17 | 1,1,1-Trichloroethane | ND | 20 | μg/Kg | 52 | 1,4-Dichlorobenzene | ND | 20 | μg/Kg |
| 18 | 1,1-Dichloropropene | ND | 20 | μg/Kg | 53 | 4-isopropyltoluene | ND | 20 | μg/Kg |
| 19 | Carbon tetrachloride | ND | 20 | μg/Kg | 54 | 1,2-Dichlorobenzene | ND | 20 | μg/Kg |
| 20 | Benzene | ND | 5.0 | μg/Kg | 55 | n-Butylbenzene | ND | 20 | μg/Kg |
| 21 | Dibromomethane | ND | 20 | µg/Kg | 56 | 1,2-Dibromo-3-chloropropane (DBCP) | ND | 100 | μg/Kg |
| 22 | 1,2-Dichloropropane | ND | 20 | µg/Kg | 57 | 1.2.4-Trichlorobenzene | ND | 40 | ua/Ka |
| 23 | Trichloroethene | ND | 20 | μg/Kg | 58 | Naphthalene | ND | 40 | μα/Kα |
| 24 | Bromodichloromethane | ND | 20 | µg/Kg | 59 | Hexachlorobutadiene | ND | 40 | μg/Kg |
| 25 | cis-1,3-Dichloropropene | ND | 20 | µg/Kg | 60 | 1,2,3-Trichlorobenzene | ND V | 40 | μα/Kα |
| 26 | trans-1,3-Dichloropropene | ND | 20 | μg/Kg | 61 | Surr: 1,2-Dichloroethane-d4 | 94 | | %REC |
| 27 | 1,1,2-Trichloroethane | ND | 20 | μg/Kg | 62 | Surr: Toluene-d8 | 96 | | %REC |
| 28 | Toluene | ND | 5.0 | µа/Ка | 63 | Surr: 4-Bromofluorobenzene | 91 | | %REC |
| 29 | 1.3-Dichloropropane | ND | 20 | µg/Kg | | | , , | | 707 120 |
| 30 | Dibromochloromethane | ND | 20 | μg/Kg | | | | | |
| 31 | 1,2-Dibromoethane (EDB) | ND | | μg/Kg | | | | | |
| 32 | Tetrachioroethene | ND | | µg/Kg | | | | | |
| 33 | 1,1,1,2-Tetrachioroethane | ND | | µg/Kg | | | | | |
| 34 | Chlorobenzene | ND | | μg/Kg | | | | | |
| 35 | Ethylbenzene | ND 🖖 | 5.0 | μg/Kg | | | | | |

EnCore sample was not received within the 48-hour extraction holding time. Sample was extracted 2 days and 2 hours, outside of holding time, and analyzed per client request.

ND = Not Detected

Roger L. Scholl, Ph.D., Laboratory Director · Randy Clarifier, Laboratory Manager · · Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

7/21/05 Report Date

Page 1 of 1



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Phone: (614) 424-7160 (614) 424-3667

Bob Janosy

Fax:

Attn:

Job#: T0102

Alpha Analytical Number: BMI05071561-05A Client I.D. Number: 1523-SW11-10

Sampled: 07/13/05

Received: 07/15/05 Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

| | | | Reporti | ng | | | | Reporti | ng |
|----|--------------------------------|---------------|---------|---------|----|------------------------------------|---------------|---------|-------|
| | Compound | Concentration | Limit | | - | Compound | Concentration | Limit | |
| 1 | Dichlorodifluoromethane | EN DN | 100 | μg/Kg | 36 | m,p-Xylene | LN DN | 50 | μg/Kg |
| 2 | Chloromethane | ND | 200 | μg/Kg | 37 | Bromoform | ND 1 | 100 | μg/Kg |
| 3 | Vinyl chloride | ND | 100 | μg/Kg | 38 | Styrene | ND | 100 | μg/Kg |
| 4 | Chloroethane | ND | 100 | μg/Kg | 39 | o-Xylene | ND | 50 | µg/Kg |
| 5 | Bromomethane | ND | 400 | μg/Kg | 40 | 1,1,2,2-Tetrachioroethane | ND | 100 | ug/Kg |
| 6 | Trichlorofluoromethane | ND | 100 | µg/Kg | 41 | 1,2,3-Trichloropropane | ND | 400 | µg/Kg |
| 7 | 1,1-Dichloroethene | ND | 100 | μg/Kg | 42 | Isopropylbenzene | ND | 100 | µg/Kg |
| 8 | Dichloromethane | ND | 400 | μg/Kg | 43 | Bromobenzene | ND | 100 | µg/Kg |
| 9 | trans-1,2-Dichloroethene | ND | 100 | µg/Kg | 44 | n-Propylbenzene | ND | 100 | μg/Kg |
| 10 | Methyl tert-butyl ether (MTBE) | ND | 50 | μg/Kg | 45 | 4-Chlorotoluene | ND | 100 | μg/Kg |
| 11 | 1.1-Dichloroethane | ND | 100 | µg/Kg | 46 | 2-Chlorotoluene | ND | 100 | μg/Kg |
| 12 | cis-1.2-Dichloroethene | ND | 100 | μg/Kg ် | 47 | 1,3,5-Trimethylbenzene | ND | 100 | µg/Kg |
| 13 | Bromochloromethane | ND | 100 | μg/Kg | 48 | tert-Butylbenzene | ND , | 100 | μg/Kg |
| 14 | Chloroform | ND | 100 | µa/Ka | 49 | 1.2.4-Trimethylbenzene | ND 💆 | 100 | µg/Kg |
| 15 | 2,2-Dichloropropane | ND | 100 | µg/Kg | 50 | sec-Butylbenzene | 140 J | 100 | µg/Kg |
| 16 | 1,2-Dichloroethane | ND | 100 | µg/Kg | 51 | 1,3-Dichlorobenzene | LN DN | 100 | µg/Kg |
| 17 | 1,1,1-Trichloroethane | ND | 100 | µg/Kg | 52 | 1,4-Dichlorobenzene | ND | 100 | μg/Kg |
| 18 | 1.1-Dichloropropene | ND - | 100 | μg/Kg | 53 | 4-Isopropyltoluene | ND , | 100 | µg/Kg |
| 19 | Carbon tetrachloride | ND | 100 | μg/Kg | 54 | 1,2-Dichlorobenzene | ND 🖳 | 100 | µg/Kg |
| 20 | Benzene | ND | 50 | μg/Kg | 55 | n-Butylbenzene | 120 - | 100 | µg/Kg |
| 21 | Dibromomethane | ND | 100 | μg/Kg | 56 | 1,2-Dibromo-3-chloropropane (DBCP) | | 600 | μg/Kg |
| 22 | 1.2-Dichloropropane | ND | 100 | μg/Kg | 57 | 1,2,4-Trichlorobenzene | ND | 400 | µg/Kg |
| 23 | Trichloroethene | ND | 100 | μg/Kg | 58 | Naphthalene | ND | 400 | μg/Kg |
| 24 | Bromodichloromethane | ND | 100 | μg/Kg | 59 | Hexachlorobutadiene | ND , | 400 | μg/Kg |
| 25 | cis-1,3-Dichloropropene | ND | 100 | μg/Kg | 60 | 1,2,3-Trichlorobenzene | ND V | 400 | μg/Kg |
| 26 | trans-1,3-Dichloropropene | ND | 100 | μg/Kg | 61 | Surr: 1,2-Dichloroethane-d4 | 92 | | %REC |
| 27 | 1,1,2-Trichloroethane | ND | 100 | μg/Kg | 62 | Surr: Toluene-d8 | 95 | | %REC |
| 28 | Toluene | ND | 50 | µg/Kg | 63 | Surr: 4-Bromofluorobenzene | 96 | | %REC |
| 29 | 1.3-Dichloropropane | ND | 100 | μg/Kg | | | | | |
| 30 | Dibromochloromethane | ND | 100 | μg/Kg | | | | | |
| 31 | 1,2-Dibromoethane (EDB) | ND | 400 | µg/Kg | | | | | |
| 32 | Tetrachloroethene | ND | 100 | μg/Kg | | | | | |
| 33 | 1,1,1,2-Tetrachloroethane | ND | 100 | µg/Kg | | | | | |
| 34 | Chlorobenzene | ND . | 100 | µg/Kg | | | | | |

Reporting Limits were increased due to high concentrations of non-target analytes. EnCore sample was received and extracted within holding time.

ND = Not Detected

34 Chlorobenzene 35 Ethylbenzene

Roger Scholl Kandy Souline Walter Hinchman, Quality Assurance Officer

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Report Date

Page 1 of 1



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: T0102

Attn: Bob Janosy

Phone: (614) 424-7160

Fax:

(614) 424-3667

Alpha Analytical Number: BMI05071561-06A

Client I.D. Number: 1523-BS1-12

Sampled: 07/12/05

Received: 07/15/05 Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

| | | | Report | ing | | | Reporting | | ing |
|-------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|--------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Compound | Concentration | Limi | t | | Compound | Concentration | Limit | t |
| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 | Dichlorodifluoromethane Chloromethane Vinyl chloride Chloroethane Bromomethane Trichlorofluoromethane 1,1-Dichloroethene Dichloromethane trans-1,2-Dichloroethene Methyl tert-butyl ether (MTBE) 1,1-Dichloroethane cis-1,2-Dichloroethene Bromochloromethane Chloroform 2,2-Dichloropropane 1,2-Dichloropropane 1,1-Trichloroethane 1,1-Trichloroethane 1,1-Trichloropropane 1,2-Dichloropropane 1,2-Dichloropropane 1,1-Dichloropropane 1,1-Trichloroethane 1,1-Dichloropropane Trichloroethane Bromodichloromethane 1,2-Dichloropropane Trichloroethene Bromodichloromethane cis-1,3-Dichloropropene | | 100 200 100 100 400 100 400 100 100 100 100 1 | ра/Ка ра/Ка ра/Ка ра/Ка ра/Ка ра/Ка ра/Ка ра/Ка ра/Ка ра/Ка ра/Ка ра/Ка ра/Ка ра/Ка ра/Ка ра/Ка ра/Ка ра/Ка ра/Ка ра/Ка ра/Ка ра/Ка ра/Ка ра/Ка ра/Ка | 366 377 388 399 400 411 422 433 444 455 50 51 52 53 55 56 57 58 59 60 | m,p-Xylene Bromoform Styrene o-Xylene 1,1,2,2-Tetrachloroethane 1,2,3-Trichloropropane Isopropylbenzene Bromobenzene n-Propylbenzene 4-Chlorotoluene 2-Chlorotoluene 1,3,5-Trimethylbenzene tert-Butylbenzene tert-Butylbenzene 1,2-4-Trimethylbenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 1,2-Dichlorobenzene 1,2-Dichlorobenzene 1,2-Dichlorobenzene 1,2-Dibromo-3-chloropropane (DBCP) 1,2,4-Trichlorobenzene Naphthalene Hexachlorobutadiene 1,2,3-Trichlorobenzene | N | • | 19/Kg 19/Kg 19/Kg 19/Kg 19/Kg 19/Kg 19/Kg 19/Kg 19/Kg 19/Kg 19/Kg 19/Kg 19/Kg 19/Kg 19/Kg 19/Kg 19/Kg 19/Kg 19/Kg 19/Kg 19/Kg 19/Kg 19/Kg |
| 26 27 28 29 30 | trans-1,3-Dichloropropene 1,1,2-Trichloroethane Toluene 1,3-Dichloropropane Dibromochloromethane | ND ND ND ND | 100 100 50 100 100 | µg/Kg µg/Kg µg/Kg µg/Kg µg/Kg | 61 62 63 | Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene | 92 96 96 | | %REC %REC %REC |
| 31 32 | 1,2-Dibromoethane (EDB) Tetrachloroethene | ND ND | 400 | μg/Kg μg/Kg | | | | | |

Reporting Limits were increased due to high concentrations of non-target analytes.

EnCore sample was not received within the 48-hour extraction holding time. Sample was extracted 3 days and 4 hours, outside of holding time, and analyzed per client request.

ND = Not Detected

33 1,1,1,2-Tetrachloroethane34 Chlorobenzene35 Ethylbenzene

Roger Scholl

Kandy Salmer

Walter Atribur

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

7/21/05 Report Date

Page 1 of 1



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: T0102

Attn: Phone:

Bob Janosy (614) 424-7160

(614) 424-3667

Fax:

Alpha Analytical Number: BMI05071561-07A

Client I.D. Number: 1523-BS4-13

Sampled: 07/12/05

Received: 07/15/05 Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

| | | | Reporti | ing | | • | | Reporti | ng |
|----|--------------------------------|---------------|---------|-------|----|------------------------------------|---------------|---------|-------|
| | Compound | Concentration | Limit | t | | Compound | Concentration | Limit | |
| 1 | Dichlorodifluoromethane | NDUJ | 100 | μg/Kg | 36 | m,p-Xylene | LN DN | 50 | μg/Kg |
| 2 | Chloromethane | ND 1 | 200 | μg/Kg | 37 | Bromoform | ND 1 | 100 | μα/Κα |
| 3 | Vinyl chloride | ND | 100 | μg/Kg | 38 | Styrene | ND | 100 | μg/Kg |
| 4 | Chloroethane | ND | 100 | μg/Kg | 39 | o-Xylene | ND | 50 | μα/Kg |
| 5 | Bromomethane | ND | 400 | μg/Kg | 40 | 1,1,2,2-Tetrachioroethane | ND | 100 | μg/Kg |
| 6 | Trichlorofluoromethane | ND | 100 | μg/Kg | 41 | 1,2,3-Trichloropropane | ND | 400 | μg/Kg |
| 7 | 1,1-Dichloroethene | ND | 100 | μg/Kg | 42 | Isopropylbenzene | ND | 100 | μg/Kg |
| 8 | Dichloromethane | ND | 400 | μg/Kg | 43 | Bromobenzene | ND | 100 | μg/Kg |
| 9 | trans-1,2-Dichloroethene | ND | 100 | μg/Kg | 44 | n-Propylbenzene | ND | 100 | μg/Kg |
| 10 | Methyl tert-butyl ether (MTBE) | ND | 50 | µg/Kg | 45 | 4-Chlorotoluene | ND | 100 | μα/Kg |
| 11 | 1.1-Dichloroethane | ND | 100 | µg/Kg | 46 | 2-Chlorotoluene | ND | 100 | μg/Kg |
| 12 | cis-1,2-Dichloroethene | ND | 100 | µg/Kg | 47 | 1,3,5-Trimethylbenzene | ND | 100 | μg/Kg |
| 13 | Bromochloromethane | ND | 100 | μg/Kg | 48 | tert-Butylbenzene | ND | 100 | μg/Kg |
| 14 | Chloroform | ND | 100 | μg/Kg | 49 | 1,2,4-Trimethylbenzene | ND | 100 | µg/Kg |
| 15 | 2,2-Dichloropropane | ND | 100 | μg/Kg | 50 | sec-Butylbenzene | ND | 100 | µg/Kg |
| 16 | 1,2-Dichloroethane | ND | 100 | μg/Kg | 51 | 1,3-Dichlorobenzene | ND . | 100 | μg/Kg |
| 17 | 1,1,1-Trichloroethane | ND | 100 | μg/Kg | 52 | 1,4-Dichlorobenzene | ND 4 | 100 | ug/Kg |
| 18 | 1,1-Dichloropropene | ND | 100 | μg/Kg | 53 | 4-Isopropyltoluene | 120 J | 100 | μα/Kg |
| 19 | Carbon tetrachloride | ND | 100 | μg/Kg | 54 | 1,2-Dichlorobenzene | NDUT | 100 | μg/Kg |
| 20 | Benzene | ND | 50 | μg/Kg | 55 | n-Butylbenzene | 140 J | 100 | ua/Ka |
| 21 | Dibromomethane | ND | 100 | μg/Kg | 56 | 1,2-Dibromo-3-chloropropane (DBCP) | ND ULT | 600 | μg/Kg |
| 22 | 1,2-Dichloropropane | ND | 100 | µg/Kg | 57 | 1,2,4-Trichlorobenzene | ND I | 400 | μg/Kg |
| 23 | Trichloroethene | ND | 100 | μg/Kg | 58 | Naphthalene | ND | 800 | µg/Kg |
| 24 | Bromodichloromethane | ND | 100 | μg/Kg | 59 | Hexachlorobutadiene | ND | 400 | µg/Kg |
| 25 | cis-1,3-Dichloropropene | ND | 100 | μg/Kg | 60 | 1,2,3-Trichlorobenzene | ND V | 400 | µg/Kg |
| 26 | trans-1,3-Dichloropropene | ND | 100 | µg/Kg | 61 | Surr: 1,2-Dichloroethane-d4 | 91 | | %REC |
| 27 | 1,1,2-Trichloroethane | ND | 100 | µg/Kg | 62 | Surr: Toluene-d8 | 96 | | %REC |
| 28 | Toluene | ND | 50 | μα/Kg | 63 | Surr: 4-Bromofluorobenzene | 97 | | %REC |
| 29 | 1.3-Dichloropropane | ND | 100 | μg/Kg | | | | ' | |
| 30 | Dibromochloromethane | ND | 100 | μα/Κα | | | | | |
| 31 | 1,2-Dibromoethane (EDB) | ND | 400 | μg/Kg | | | | | |
| 32 | Tetrachloroethene | ND | 100 | μg/Kg | | | | | |
| 33 | 1,1,1,2-Tetrachloroethane | ND | 100 | μg/Kg | | | | | |
| | | 1 1 | | | | | | | |

Reporting Limits were increased due to high concentrations of non-target analytes.

EnCore sample was not received within the 48-hour extraction holding time. Sample was extracted 3 days and 2 hours, outside of holding time, and analyzed per client request.

ND = Not Detected

Chlorobenzene 35 Ethylbenzene

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

7/21/05 Report Date

Page 1 of 1



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201 Job#:

T0102

Alpha Analytical Number: BMI05071561-08A

Client I.D. Number: 1523-BS6

Attn: **Bob Janosy**

Phone: (614) 424-7160

(614) 424-3667 Fax:

Sampled: 07/12/05

Received: 07/15/05 Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

| | | | Reporting | | | | Reporting | |
|----|--------------------------------|---------------|-----------|------|------------------------------------|---------------|-----------|------|
| | Compound | Concentration | Limit | | Compound | Concentration | Limit | |
| 1 | Dichlorodifluoromethane | LN ON | 200 µg/K | g 36 | m,p-Xylene | ND UJ | | g/Kg |
| 2 | Chloromethane | ND 1 | 400 µg/K | g 37 | Bromoform | ND 1 | | g/Kg |
| 3 | Vinvi chloride | ND | 200 µg/K | g 38 | Styrene | ND | | g/Kg |
| 4 | Chloroethane | ND | 200 µg/K | g 39 | o-Xylene | ND | | g/Kg |
| 5 | Bromomethane | ND | 800 µg/K | g 40 | 1,1,2,2-Tetrachloroethane | ND | | g/Kg |
| 6 | Trichlorofluoromethane | ND | 200 µg/K | g 41 | 1,2,3-Trichloropropane | ND | | g/Kg |
| 7 | 1.1-Dichloroethene | ND | 200 µg/Kg | g 42 | Isopropyibenzene | ND | | g/Kg |
| 8 | Dichloromethane | ND | 800 µg/Kg | g 43 | Bromobenzene | ND | 200 μς | g/Kg |
| 9 | trans-1.2-Dichloroethene | ND | 200 µg/Kg | g 44 | n-Propylbenzene | ND | 200 μς | g/Kg |
| 10 | Methyl tert-butyl ether (MTBE) | ND | 100 µg/Kg | g 45 | 4-Chlorotoluene | ND | 200 μς | g/Kg |
| 11 | 1.1-Dichloroethane | ND | 200 µg/Kg | g 46 | 2-Chlorotoluene | ND | 200 μg | g/Kg |
| 12 | cis-1.2-Dichloroethene | ND | 200 μg/Kg | g 47 | 1,3,5-Trimethylbenzene | ND | 200 μg | g/Kg |
| 13 | Bromochloromethane | ND | 200 µg/Kg | g 48 | tert-Butylbenzene | ND ' | 200 µg | g/Kg |
| 14 | Chloroform | ND | 200 µg/Kg | g 49 | 1,2,4-Trimethylbenzene | ND | 200 µg | g/Kg |
| 15 | 2.2-Dichloropropane | ND | 200 µg/Kg | g 50 | sec-Butylbenzene | ND | 200 µg | g/Kg |
| 16 | 1.2-Dichloroethane | ND | 200 μg/Kg | g 51 | 1,3-Dichlorobenzene | ND | 200 µg | g/Kg |
| 17 | 1.1.1-Trichlorgethane | ND | 200 μg/Kg | g 52 | 1,4-Dichlorobenzene | ND 🕌 | 200 µg | g/Kg |
| 18 | 1,1-Dichloropropene | ND | 200 μg/Kg | g 53 | 4-lsopropyltoluene | 210 5 | 200 µg | 3/Kg |
| 19 | Carbon tetrachloride | ND | 200 µg/Kg | g 54 | 1,2-Dichlorobenzene | ND 1/2 | 200 µg | g/Kg |
| 20 | Benzene | ND | 100 µg/Kg | g 55 | n-Butylbenzene | 230 4 | 200 µg | g/Kg |
| 21 | Dibromomethane | ND | 200 µg/Kg | | 1,2-Dibromo-3-chloropropane (DBCP) | LN DN | 1,200 µg | /Kg |
| 22 | 1.2-Dichloropropane | ND | 200 µg/Kg | 57 | 1,2,4-Trichlorobenzene | ND | 800 µg | /Kg |
| 23 | Trichloroethene | ND | 200 µg/Kg | a 58 | Naphthalene | ND | 800 µg | /Kg |
| 24 | Bromodichloromethane | ND | 200 µg/Kg | | Hexachlorobutadiene | ND | 800 µg | /Kg |
| 25 | cis-1.3-Dichloropropene | ND | 200 µg/Kg | | 1,2,3-Trichlorobenzene | ND V | 800 µg | /Kg |
| 26 | trans-1,3-Dichloropropene | ND | 200 μg/Kg | - | Surr: 1,2-Dichloroethane-d4 | 92 | %F | REC |
| 27 | 1.1.2-Trichloroethane | ND | 200 μg/Kg | | Surr: Toluene-d8 | 95 | %F | REC |
| 28 | Toluene | ND | 100 µg/Kg | _ | Surr: 4-Bromofluorobenzene | 97 | %F | REC |
| 29 | 1,3-Dichloropropane | ND | 200 µg/Kg | _ | | | | |
| 30 | Dibromochloromethane | ND | 200 µg/Kg | | | | | |
| 31 | 1.2-Dibromoethane (EDB) | ND | 800 µg/Kg | | | | | |
| 32 | Tetrachloroethene | ND | 200 µg/Kg | - | | | | |
| 33 | 1.1.1.2-Tetrachloroethane | ND | 200 µg/Kg | | | | | |
| 34 | Chlorobenzene | ND | 200 µg/Kg | | | | | |
| 34 | Chiologonicono | ND | 100 40/6 | | | | | |

Reporting Limits were increased due to high concentrations of non-target analytes.

EnCore sample was not received within the 48-hour extraction holding time. Sample was extracted 3 days, outside of holding time, and analyzed per client request.

ND = Not Detected

35 Ethylbenzene

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

7/21/05 Report Date

Page 1 of 1



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: T0102

Alpha Analytical Number: BMI05071561-09A

Client I.D. Number: 1523-BS8

Attn: **Bob Janosy**

Phone: (614) 424-7160 Fax:

(614) 424-3667

Sampled: 07/12/05

Received: 07/15/05 Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

| | | | Report | ing | | | | Report | ing |
|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Compound | Concentration | Limit | t | | Compound | Concentration | Limit | t |
| 1 2 3 4 5 6 7 8 9 100 111 122 133 144 156 177 18 19 20 21 22 | Dichlorodifluoromethane Chloromethane Vinyl chloride Chloroethane Bromomethane Trichlorofluoromethane 1,1-Dichloroethene Dichloromethane trans-1,2-Dichloroethene Methyl tert-butyl ether (MTBE) 1,1-Dichloroethane cis-1,2-Dichloroethene Bromochloromethane Chloroform 2,2-Dichloropropane 1,2-Dichloroethane 1,1-Trichloroethane 1,1-Trichloroethane 1,1-Dichloropropene Carbon tetrachloride Benzene Dibromomethane 1,2-Dichloropropane | | Limit 100 200 100 100 400 100 100 400 100 100 100 1 | µд/Кд µд/Кд µд/Кд µд/Кд µд/Кд µд/Кд µд/Кд µд/Кд µд/Кд µд/Кд µд/Кд µд/Кд µд/Кд µд/Кд µд/Кд µд/Кд | 36 37 38 39 40 41 42 43 44 45 55 53 54 55 56 57 | m,p-Xylene Bromoform Styrene o-Xylene 1.1.2.2-Tetrachloroethane 1.2.3-Trichloropropane Isopropylbenzene Bromobenzene n-Propylbenzene 4-Chlorotoluene 2-Chlorotoluene 1.3.5-Trimethylbenzene tert-Butylbenzene 1.2,4-Trimethylbenzene 1.3-Dichlorobenzene 1.4-Dichlorobenzene 1.4-Dichlorobenzene 1.2-Dibromo-3-chloropropane (DBCP) 1.2,4-Trichlorobenzene | N | 100 100 100 100 100 100 100 100 100 100 | 194 Kg g 194 |
| 23 24 25 | Trichloroethene Bromodichloromethane cis-1,3-Dichloropropene | ND ND ND | 100 100 100 | μg/Kg μg/Kg μg/Kg | 58 59 60 | Naphthalene Hexachlorobutadiene 1,2,3-Trichlorobenzene | ND ND ND | 1,000 400 400 | μg/Kg μg/Kg μg/Kg |
| 26 27 | trans-1,3-Dichloropropene 1,1,2-Trichloroethane | ND ND | 100 100 | μg/Kg μg/Kg | 61 62 | Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 | 92 95 | ,,,, | %REC %REC |
| 28 29 30 31 32 33 | Toluene 1,3-Dichloropropane Dibromochloromethane 1,2-Dibromoethane (EDB) Tetrachloroethene 1,1,1,2-Tetrachloroethane | ND ND ND ND ND ND | 50 100 100 400 100 | hā\Kā hā\Kā hā\Kā hā\Kā hā\Kā | 63 | Surr: 4-Bromofluorobenzene | 95 | | %REC |

Reporting Limits were increased due to high concentrations of non-target analytes.

Roger Scholl

EnCore sample was not received within the 48-hour extraction holding time. Sample was extracted 3 days, outside of holding time, and analyzed per client request.

100 µg/Kg

ND = Not Detected

34 Chlorobenzene

35 Ethylbenzene

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

7/21/05 Report Date

Page 1 of 1



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201 Jo**b**#:

T0102

Alpha Analytical Number: BMI05071561-09A

Client I.D. Number: 1523-BS8

Attn: **Bob Janosy**

Phone: (614) 424-7160 Fax: (614) 424-3667

Sampled: 07/12/05 Received: 07/15/05

Analyzed: 07/27/05

Volatile Organics by GC/MS EPA Method SW1312 / SW8260B

| | | | Reporti | ng | | | | Reportin | g |
|----|---------------------------|---------------|---------|------|----|------------------------------------|---------------|----------|------|
| | Compound | Concentration | Limit | | | Compound | Concentration | Limit | |
| 1 | Dichlorodifluoromethane | ND U | 5.0 | µg/L | 36 | m,p-Xylene | ND 🖍 | 5.0 | μg/L |
| 2 | Chloromethane | ND | 10 | µg/L | 37 | Bromoform | ND | 5.0 | µg/L |
| 3 | Vinyl chloride | ND | 5.0 | μg/L | 38 | Styrene | ND | 5.0 | µg/L |
| 4 | Chloroethane | ND J | 5.0 | µg/L | 39 | o-Xylene | ND V | 5.0 | μg/L |
| 5 | Bromomethane | NDUI | 2.0 | μg/L | 40 | 1,1,2,2-Tetrachloroethane | NDUJ | 5.0 | µg/L |
| 6 | Trichlorofluoromethane | ND [A | 5.0 | µg/L | 41 | 1,2,3-Trichloropropane | NDIA | 10 | µg/L |
| 7 | 1,1-Dichloroethene | ND | 5.0 | μg/L | 42 | Isopropylbenzene | ND J | 5.0 | μg/L |
| 8 | Dichloromethane | ND | 50 | μg/L | 43 | Bromobenzene | ND | 5.0 | µg/L |
| 9 | trans-1,2-Dichloroethene | ND | 5.0 | µg/L | 44 | n-Propylbenzene | ND | 5.0 | µg/L |
| 10 | 1,1-Dichloroethane | ND | 5.0 | μg/L | 45 | 4-Chlorotoluene | ND | 5.0 | μg/L |
| 11 | 2-Butanone (MEK) | ND | 20 | μg/L | 46 | 2-Chlorotoluene | ND | 5.0 | μg/L |
| 12 | cis-1,2-Dichloroethene | ND | 5.0 | µg/L | 47 | 1,3,5-Trimethylbenzene | ND | 5.0 | μg/L |
| 13 | Bromochloromethane | ND , | 5.0 | μg/L | 48 | tert-Butylbenzene | ND & | 5.0 | μg/L |
| 14 | Chloroform | ND V | 5.0 | ug/L | 49 | 1.2.4-Trimethylbenzene | 6.4 | 5.0 | µg/L |
| 15 | 2,2-Dichloropropane | LN DN | 5.0 | μg/L | 50 | sec-Butylbenzene | ND | 5.0 | μg/L |
| 16 | 1,2-Dichloroethane | ND | 5.0 | μg/L | 51 | 1,3-Dichlorobenzene | ND I | 5.0 | μg/L |
| 17 | 1,1,1-Trichloroethane | ND") | 5.0 | μg/L | 52 | 1,4-Dichlorobenzene | ND | 5.0 | µg/L |
| 18 | 1,1-Dichloropropene | ND | 5.0 | μg/L | 53 | 4-isopropyltoluene | ND | 5.0 | µg/L |
| 19 | Carbon tetrachloride | ND | 5.0 | μg/L | 54 | 1,2-Dichlorobenzene | ND | 5.0 | µg/L |
| 20 | Benzene | ND | 1.0 | μg/L | 55 | n-Butylbenzene | ND . | 5.0 | μg/L |
| 21 | Dibromomethane | ND | 5.0 | μg/L | 56 | 1,2-Dibromo-3-chloropropane (DBCP) | ND | 5.0 | μg/L |
| 22 | 1,2-Dichloropropane | ND , | 5.0 | µg/L | 57 | 1,2,4-Trichlorobenzene | ND ₩ | 10 | µg/L |
| 23 | Trichloroethene | ND V | 5.0 | µg/L | 58 | Naphthalene | 18 | | µg/L |
| 24 | Bromodichloromethane | LN DN | 5.0 | μg/L | 59 | Hexachlorobutadiene | ND 🖟 | 10 | µg/L |
| 25 | cis-1,3-Dichloropropene | ND LA | 5.0 | μg/L | 60 | 1,2,3-Trichlorobenzene | ND J | 10 | µg/L |
| 26 | trans-1,3-Dichloropropene | ND | 5.0 | μg/L | 61 | Surr: 1,2-Dichloroethane-d4 | 94 | % | 6REC |
| 27 | 1,1,2-Trichloroethane | ND | 5.0 | μg/L | 62 | Surr: Toluene-d8 | 103 | % | 6REC |
| 28 | Toluene | ND | 5.0 | μg/L | 63 | Surr: 4-Bromofluorobenzene | 91 | % | 6REC |
| 29 | 1,3-Dichloropropane | ND | 5.0 | µg/L | | | | | |
| 30 | Dibromochloromethane | ND | 5.0 | μg/L | | | | | |
| 31 | 1,2-Dibromoethane (EDB) | ND | 10 | µg/L | | | | | |
| 32 | Tetrachloroethene | ND | 5.0 | µg/L | | | | | |
| 33 | 1,1,1,2-Tetrachloroethane | ND | 5.0 | µg/L | | | | | |
| 34 | Chlorobenzene | ND | 5.0 | μg/L | | | | | |
| 35 | Ethylbenzene | ND V | 5.0 | µg/L | | | | | |

This analysis was performed on an SPLP extract.

ND = Not Detected

Roger Scholl Kandy Sarlow Walter Hinchman, Quality Assurance Officer Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Report Date

Page 1 of 1

| LDC #: 13928A1 | VALIDATION COMPLETENESS WORKSHEET | Date: 9/05/00 |
|------------------------------------------|-----------------------------------|----------------|
| SDG #: BMI05071561 | Level III/IV | Page: <u> </u> |
| Laboratory: <u>Alpha Analytical, Inc</u> | • | Reviewer: 3V6 |
| | | 2nd Reviewer: |
| METHOD: GC/MS Volatiles (EP | A SW 846 Method 8260B) | y |

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

| | Validation Area | | Comments |
|-------|------------------------------------------------|------------|----------------------------------------|
| l. | Technical holding times | SW | Sampling dates: 7/12-13/05 |
| 11. | GC/MS Instrument performance check | A | · |
| 111. | Initial calibration | ζW | % RSD r ² |
| IV. | Continuing calibration | SW | , |
| V. | Blanks | A | |
| VI. | Surrogate spikes | A | |
| VII. | Matrix spike/Matrix spike duplicates | N | Client specified |
| VIII. | Laboratory control samples | S M | lcs |
| IX. | Regional Quality Assurance and Quality Control | N | |
| X. | Internal standards | Α | |
| XI. | Target compound identification | Α | Not reviewed for Level III validation. |
| XII. | Compound quantitation/CRQLs | A | Not reviewed for Level III validation. |
| XIII. | Tentitatively identified compounds (TICs) | N | Not reviewed for Level III validation. |
| XIV. | System performance | А | Not reviewed for Level III validation. |
| XV. | Overall assessment of data | A | |
| XVI. | Field duplicates | SM | D = 1,3 |
| XVII. | Field blanks | 2 | |

ND = No compounds detected D = Duplicate Note:

A = Acceptable N = Not provided/applicable SW = See worksheet R = Rinsate FB = Field blank TB = Trip blank EB = Equipment blank

Validated Samples: ** Indicates sample underwent Level IV validation

| | 501 | <u> </u> | | | | | | |
|-------------------|------------------------------------------|----------|---------|----------------------------------------------|-----------|-----------------|----|--|
| | -1523-SW3-10** | D | 7 11 | <i>CPLP</i> 1523-BS8 (TCLP)** | 21 | MBLK MSIOWO727A | 31 | |
| 2 1 | SPLP 1523-SW3-10(TGLP)** | | 12 | | - 22 γ | MBLK MS0752654A | | |
| 1 3 | ,1523-SW3-10 Dup | D | 13 | | 23 | | 33 | |
| 4 | ,1523-SW7 | | 14 | | 24 | | 34 | |
| 5 | 1523-SW8-10 | | 15 | | 25 | | 35 | |
| ↓ 6 | 1523-SW11-10 | | 16 | | 26 | | 36 | |
| 4 7 | 1523-BS1-12 | | 17 | | 27 | | 37 | |
| + 8 | 1523-BS4-13 | | 18 | | 28 | | 38 | |
| † 9 | 1523-BS6 | | 19 | | 29 | | 39 | |
| † 10 | 1523-BS8** | | 20 | | 30 | | 40 | |

LDC #: [3928 A] SDG #: BMIOS 07 [57]

VALIDATION FINDINGS CHECKLIST

Method: Volatiles (EPA SW 846 Method 8260B)

| Method: Volatiles (EPA SW 846 Method 8260B) | | T | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Validation Area | Yes | No | NA | Findings/Comments |
| I. Technical holding times | 1 | , | i i | |
| All technical holding times were met. | MI | √ | | |
| Cooler temperature criteria was met. | | | | |
| II. GC/MS Instrument performance check | edes I | | | |
| Were the BFB performance results reviewed and found to be within the specified criteria? | | | | |
| Were all samples analyzed within the 12 hour clock criteria? | | | | |
| III. Initial calibration | | | Γ | |
| Did the laboratory perform a 5 point calibration prior to sample analysis? | | | | |
| Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs? | | | | |
| Was a curve fit used for evaluation? | | | | |
| Did the initial calibration meet the curve fit acceptance criteria of > 0.990? | _ | | | |
| Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) ≥ 0.05? | | | | |
| iv. Continuing calibration | | | | |
| Was a continuing calibration standard analyzed at least once every 12 hours for each instrument? | | | | |
| Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs? | | | | |
| Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05? | | | _ | |
| V. Blanks | | | | Sugar de La Caracter |
| Was a method blank associated with every sample in this SDG? | | | | |
| Was a method blank analyzed at least once every 12 hours for each matrix and concentration? | | | | |
| Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet. | | | | |
| VI. Surrogate spikes | | #7 F | | |
| Were all surrogate %R within QC limits? | | | | |
| If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria? | | | | |
| VII. Matrix spike/Matrix spike duplicates | | | | |
| Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water. | | / | | |
| Was a MS/MSD analyzed every 20 samples of each matrix? | | | | |
| Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits? | | | | |
| VIII. Laboratory control samples | | 2 | 1 | |
| Was an LCS analyzed for this SDG? | | | | |

LDC #: 13928A)
SDG #: PMI0507 |541

VALIDATION FINDINGS CHECKLIST

Page: 2 of 2 Reviewer: $\sqrt[3]{R}$ 2nd Reviewer: $\sqrt[4]{R}$

| Validation Area | Yes | No | NA | | Findin | gs/Co | mmer | nts |
|--------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|----------|---------|-------|--------|-------------|----------------------|----------|
| Was an LCS analyzed per analytical batch? | / | | | hall | ca | 7 .S | WS. | (2,11) |
| Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits? | / | | | - | | | ų- | · / |
| IX. Regional Quality Assurance and Quality Control | I | | 1,200 | l e e | | | | |
| Were performance evaluation (PE) samples performed? | | _ | | | | | | |
| Were the performance evaluation (PE) samples within the acceptance limits? | | - 14 | | | | | | |
| X Internal standards | | | | Γ | | | | |
| Were internal standard area counts within -50% or +100% of the associated calibration standard? | | | | | | | | |
| Were retention times within ± 30 seconds of the associated calibration standard? | | | | | | | | |
| XI. Target compound identification. | | | | | | 19/12/ | t is th | April 18 |
| Were relative retention times (RRT's) within ± 0.06 RRT units of the standard? | | | | | | | | |
| Did compound spectra meet specified EPA "Functional Guidelines" criteria? | | | | | | | | |
| Were chromatogram peaks verified and accounted for? | | | | | | G1 - 14-14 | | |
| XII. Compound quantitation/CRQLs | | | | | | 177.35 | | |
| Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound? | | | | | | | | |
| Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation? | | | | | | | | |
| XIII. Tentatively identified compounds (TICs) | | | | | 1. | | | 100 |
| Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum? | | W | | | | | | |
| Were relative intensities of the major ions within \pm 20% between the sample and the reference spectra? | | · | | - | | | | |
| Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)? | | | | | | | | |
| XIV. System performance | | <i>(</i> | | | | | | |
| System performance was found to be acceptable. | | | | | | | 045-7500*10-4*144*** | |
| XV. Overall assessment of data | | | | 1 | | | | |
| Overall assessment of data was found to be acceptable. | | | | 5.00 | | | | |
| XVI. Field duplicates | | | | | | | | |
| Field duplicate pairs were identified in this SDG. | _ | | | | | | | |
| Target compounds were detected in the field duplicates. | | | www.rac | | | | | |
| XVII. Field blanks | · · · · · · · · · · · · · · · · · · · | T | | 2 | | 7.87 | | *** |
| Field blanks were identified in this SDG. | | | | | | | | |
| Target compounds were detected in the field blanks. | | | | | | | | |

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

| A, Chloromethane* | S. Trichloroethene | KK. Trichlorofluoromethane | CCC. tert-Butylbenzene | UUU. 1.2-Dichlorotetrafluoroethane |
|------------------------------|--------------------------------|---------------------------------|--------------------------------------------|------------------------------------|
| B. Bromomethane | T. Dibromochloromethane | LL. Methyl-tert-butyl ether | nzene | WW. 4-Ethyltoluene |
| C. Vinyl choride** | U 1,1,2-Trichloroethane | MM. 1,2-Dibromo-3-chloropropane | EEE, sec-Butylbenzene | WWW. Ethanol |
| D. Chloroethane | V. Benzene | NN. Methyl ethyl ketone | FFF. 1,3-Dichlorobenzene | XXX. Di-isopropyl ether |
| E. Methylene chloride | W. trans-1,3-Dichloropropene | OO. 2,2-Dichloropropane | GGG. p-lsopropyftolusne | YYY. tert-Butanol |
| F. Acetone | X Bromoform⁴ | PP. Bromochloromethane | HHH, 1,4-Dichlorobenzene | ZZZ. tert-Butyl alcohol |
| G. Carbon disulfide | Y. 4-Methyl-2-pentanone | QQ. 1,1-Dichloropropene | III. n-But//benzene | AAAA. Ethyl tert-butyl ether |
| H. 1,1-Dichloroethene** | 2. 2-Hexanone | RR. Obromomethane | JJJ, 1,2-Dichlorobenzene | BBBB, tert-Armyl methyl ether |
| l. 1,1-Dichloroethane* | AA. Tetrachloroethene | SS. 1,3-Dichloropropane | KKK. 1,2,4-Trichlorobenzene | CCCC.1-Chlorohexane |
| J. 1,2-Dichloroethene, total | BB. 1,1,2,2-Tetrachloroelhane* | TT. 1,2-Dibromoethane | LLL. Hexachlorobutadiene | DDDD. Isopropyl alcohol |
| K, Chloroform** | CC. Toluene** | UU. 1,1,2-Tetrachloroethane | MMM. Naphihalene | EEEE. Acetonitrile |
| L. 1,2-Dichloroethane | 0D. Chlorobenzene⁴ | VV. Isopropylbenzene | NNN, 1,2,3-Trichlorobenzene | FFFF. Acrolein |
| M. 2-Butanone | EE. Ethylbenzene** | WW. Bromobenzene | 000. 1,3,5-Trichlorobenzene | GGGG. Acrylonlirile |
| N. 1,1,1-Trichloroethane | FF. Styrene | XX. 1,2,3-Trichloropropene | PPP, trans-1,2-Dichloroethene | HHHH. 1,4-Dloxane |
| O. Carbon tetrachloride | GG. Xylenes, total | YY. n-Propylbenzene | QQQ. cls-1,2-Dichloroethene | IIII. Isobutyl alcohol |
| P. Bromodichloromethane | HH. Vinyl acetate | ZZ. 2-Chlorotofuene | RRR. m,p-Xylenes | JJJJ. Methacrytonitrile |
| Q. 1,2-Dichloropropane** | II. 2-Chloroethylvinyl ether | AAA. 1,3,5-Trimethylbenzene | SSS. c-Xylene | KKKK. Proplonitrile |
| R. cls-1,3-Dichtoropropene | JJ. Dichtorodifluoromethane | BBB. 4-Chlorotoluene | TTT. 1,1,2-Trichlore-1,2,2-trifluoroethane | LILL + TEAM P |

^{* =} System performance check compounds (SPCC) for RRF; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 17928A1 SDG #: BMIO507156|

VALIDATION FINDINGS WORKSHEET **Technical Holding Times**

Page:___l_of_ Reviewer: 2nd Reviewer:

All circled dates have exceeded the technical holding times.

| METHOD : GC/I | MS VOA (EPA SI | W 846 Method | 8260B) | | | Total # | Qualifie |
|---------------|----------------|--------------|---------------|-----------------|-----------------|----------|----------|
| Sample ID | Matrix | Preserved | Sampling Date | Extraction date | (Analysis date) | of Days | |
| 3-4,7-10 | C-fencires) | N | 7/12/05 | • | 7/19/05 | 7 | TUIT |
| <u> </u> | | | | | | 6 | |
| , 6 | | | 7/13/05 | | <i>V</i> | | |
| | | | | | | | |
| z. | | | | | | | |
| | | | | | | | , |
| | | | | | | | |
| | | | | | | . | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | _ |
| | | | | | | | |
| | | | | | | | - |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

TECHNICAL HOLDING TIME CRITERIA

Water unpreserved:

Aromatic within 7 days, non-aromatic within 14 days of sample collection.

Water preserved:

Both within 14 days of sample collection.

Soil:

Both within 14 days of sample collection.

Encores unpreserved

48 hours

125/ 10 20 IMB LDC # (3928 A) SDG #:

VALIDATION FINDINGS WORKSHEET Initial Calibration

Page: \ of (Reviewer: 2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Did the laboratory perform a 5 point calibration prior to sample analysis?

Were percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCC's and SPCC's?

Was a curve fit used for evaluation? If yes, what was the acceptance criteria used for evaluation? 1220.99

Did the initial calibration meet the acceptance criteria?

Were all %RSDs and RRFs within the validation criteria of ≤30 %RSD and ≥0.05 RRF?

| | | | | | | | _ | | | | 7 | | | <u> </u> | | | | | | | | | | | Г |
|----------|------------------------------------|----------------------|----------------------------|----------------------------------------|-----------------------------------|------------------------------------|-------------------------------------|------------------------------------|---------------------------------------|-----------------------------------|-----------------------------------|-------------------------------------|-------------------------------------|----------|------------------------------------------|----------------------------------------|---------------------------------------|-----------------------------------|-----------------------------------------|--------------------------------------|--|-----------------------------------|-----------------------------------|---------------------------------------------------------------------------|-------------------------------------|
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| = | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| 0, 049 | | | | - | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | - | | | | | | | - | | | | | | | | | | | | | | | |
| CA1 | | | • | | | | | | | | | | | | | | | | | | | | | - | |
| 1 / W/00 | | | | | | | | | | - | | | | | | | | | | | | | , | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | L_ |
| | 1CA1 P 0.049 2 11 MBLK MC10W0727 A | 1 CAI MBLKMS10W07B7A | 1CAI P 2 11 MBLKMS10W07DJA | 1CA1 P C. 049 2, 11, MBLKMS 10W07127 A | 1CAI P 0. 049 2 11 MBLKMS10W07DJA | 1CA1 P C. 049 2 11 MBLKMS 10W07BJA | 1CA1 p . 0. 049 2 11 MBLKMS10W07BJA | 1CA1 P C. 049 2 11 MBLKMS 10W07BJA | 1CA1 P . 0. 049 2 11 MBLKMS 10W07BJ A | 1CA1 p 0.049 2.11 MBLKMSPOWOTBY A | 1CA1 P 0. 049 2 11 MBLKMS10W07BJA | 1CAL P 0.049 2 11 MBLKMS 10W0 TBJ A | 1CAI P 0.049 2 11 MBLK MS 10W0707 A | CA P | 1CA I P 0. 049 2, 11, MB LK MS 10W0 TB A | 1CA 1 P 0. 049 2 11 MBLK MS 10W0 TBJ A | 1CA1 P 0.049 2 11, MBLK MS 10W0 TBJ A | 1CA1 p 0.049 2 11, MB1KMS10W07D]A | 1CA J P 0. 049 2 11, MBLK MS 0WO TAPA A | 1CA1 P 0. 049 2 11, MB1K MS10W07B1 A | | 1CA1 p 2 11, MB LK MS 10 WO TB1 A | 1CA1 p 2 11, MB LK MS 10 WO TB1 A | CAL P C. 049 2, 11, MB.LK.PB.RA D D D D D D D D D | 1CA1 P 0.049 2,11, MB.LK.NS.DWOTB A |

1251 LOSO TWG LDC #: 13 928 A) SDG #:

VALIDATION FINDINGS WORKSHEET Continuing Calibration

Page: Reviewer: 2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A". Y N N/A

Was a continuing calibration standard analyzed at least once every 12 hours for each instrument? Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ? Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF?

| | | T | T | T | | T | T | Ī | Ī | T | T | T | Ī | | T | | | | | T | | | T | $\prod_{i=1}^{n}$ | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|------------------|-------|------|--------|---|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|---------|--|---|--|---|---------|---|---|-------------------|--|--|
| | Qualifications | | | | i | | | A CONTRACTOR OF THE PROPERTY O | | | | | | | | | | 1 | | | | | | | | |
| | Associated Samples | 2 11 MAIL METATA | T | , | | | | | | - | | | | | | | | | | | | | | | | |
| | ringing RRF (Limit: >0.05) | | | | .0.040 | | | ٠ | | | • | | | | | | | | | | | - | | | | |
| 0 10 mm 10 m | (Limit: <25.0%) | 7,02 | 2) 16 | 38.2 | | | | | • | | | · | | | | | | | | | | | | | | |
| | Compound | В | 00 | BB | d . | | | | - | | | • | - | • | | | | | | | | | , | | | |
| | · Standard ID | 05072704 | | | | | | | | | | | | | | | | | | | | | | | | |
| | Date | 7/27/05 | | | | | | | | | | | | | | - | | | | | | | | | | |
| | * | | | | | | | | | | | | | | | <u></u> | | | | | \perp | | | | | |

SDG #: BMI OS 07 156 LDC #: 13 928 A

VALIDATION FINDINGS WORKSHEET Laboratory Control Samples (LCS)

of | Page: Reviewer: 2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y NA V NA

#

Was a LCS required? Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

| tions | | None/p | | | | | | | - | | | | | | | | | | | | | | | |
|---------------------|---|------------------|---|---|---|----------|---|---|---|---|---------|---|---|---|----------|----------|----|---|----------|---|---|----------|---|---|
| Qualifications | | | | | | | | | | | | | | | | | ۴. | * | | | | | | |
| Samples | • | MBLK MSIOW 2727A | | | | | | | | | | | | - | | | | | | | | | | |
| Associated Samples | ٠ | 2,11 1 | | | | | | | | , | | | | | | | | | - | | | | | |
| (| (| ^ | _ | ^ | _ | ^ | ^ | ^ | _ | (| | (| (| ^ | _ | ^ | _ | (| - | _ | _ | _ | _ | • |
| RPD (Limits) |) | j | | _ | ~ |) |) |) |) | J |) |) |) |) | _ | • | | _ | _ | | |) | | , |
| | (| ^ | ^ | _ | ^ | ^ | ^ | (| (| ^ | ^ | ^ | | (| _ | ^ | î | ^ | ^ | _ | _ | ^ | ^ | · |
| LCSD %R (Limits) |) |) |) | _ | J |) | |) |) | ~ |) | ` | _ |) | - | <u> </u> |) |) | - |) |) | |) | |
| |) | 501 | _ | _ | _ | <u> </u> | _ | _ | (| ^ | ^ | ^ | _ | ^ | ^ | | - | ^ | _ | ^ | _ | ^ | _ | |
| LCS %R (Limits) |) | N Ka | _ | _ | - |) | |) |) |) | <u></u> | _ |) |) |) |) |) |) | |) |) | \ |) | |
| Compound | | reported GOV | | | | | | | | | | | | | | | | | | | | | | |
| TCS/TCSD ID | | Lab rep. | | | | | | | | | | | | | | | | | | | | | | |
| Date | | | | | | | | | | | | | | | | | | | | | | | | |

LDC #: 13928 A1 SDG #. BMI05671561

VALIDATION FINDINGS WORKSHEET Field Duplicates

| Page:_ | of |
|---------------|-----|
| Reviewer: | W . |
| 2nd reviewer: | l~ |
| | 7 |

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

| Y | Ν | N/A |
|-----|---|-----|
| (Y) | N | N/A |

Were field duplicate pairs identified in this SDG?
Were target compounds detected in the field duplicate pairs?

| | Concentration (ug/kg) | | |
|------------|------------------------|--------|-----|
| Compound | l | 3 | RPD |
| EE . | 62 | 50 U | 290 |
| SSS | 5) | V | |
| 44 | 130 | 100 U | |
| Dpp | 380 | 124 | 102 |
| EEE | 230 | 100 | 79 |
| GGG | 270 | 20 | 77 |
| | Concentrat | ion() | |
| Compound | · | | RPD |
| <i>III</i> | 300 | 160 | 61 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | Concentrat | ion (| |

| | Concentration (| | |
|----------|-----------------|---|-----|
| Compound | | | RPD |
| | | | |
| | | | |
| | | _ | |
| | | | |
| | | | |

| | Concentration (| |
|----------|-----------------|-----|
| Compound | | RPD |
| | | |
| | | |
| | | |
| | | |
| | | |

1251 Las 0 Ivig LDC #: 13928 A1 SDG #:

Initial Calibration Calculation Verification VALIDATION FINDINGS WORKSHEET

of Page: 2nd Reviewer: Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

 $\label{eq:RRF} $$RF = (A_s)(C_{h_s})(C_s)$$ average RRF = sum of the RRFs/number of standards $$RRD = 100 * (S/X)$$

 $A_{\mathbf{k}}=$ Area of essociated internal standard $C_{\mathbf{k}}=$ Concentration of internal standard

 $A_{\rm x}$ = Area of compound, $C_{\rm x}$ = Concentration of compound, S = Standard deviation of the RRFs X = Mean of the RRFs

| | | | | Reported | Recalculated | Reported | Recalculated | Reported | Recalculated |
|----|-------------|-------------|--------------------------------------------|-----------------|--------------|-------------|--------------|----------|--------------|
| : | | Calibration | | RRF | RRF | Average RRF | Average RRF | | |
| # | Standard ID | Date | Compound (Reference Internal Standard) | (2 std) | (N std) | (Initial) | (initial) | %RSD | %RSD |
| + | 72/ | 30/8/4 | Methylene chloride (1st internal standard) | 3,5978-1 | 3-18-6-1 | 3.12 e-1 | 3,125 6-1 | 13.0 | (3.0 |
| | - | 1 | Trioblorethene (2nd internal standard) | 3,326 | 3.329 | 3,395 | 3.3% | 6.9 | 6.9 |
| | MS 07 | | Tollugae (3rd internal standard) | 3,467 | 3.467 | 3.628 | 3.628 | 1) . 9 | 11.9 |
| 2 | | 1,1,1 | Methylene chloride (1st internal standard) | 2,752 6-1 8,275 | 8,275 | 2,115e-1 | 2, (St. e-1 | 7.7 | 7.7 |
| | 151 | 10/U/s | Highlorethene (2nd internal standard) | 2,9:0 | 2.910 | 2,997 | 2,997 | 3,2 | 4.4 |
| | MS10 | | Internal standard) | 2.342 | 2.342 | 2.826 | 2,826 | 13.7 | (3,7 |
| 60 | | | Methylene chloride (1st internal standard) | | | | | | |
| | | | Trichlorethene (2nd Internal standard) | | | | | | |
| | | | Toluene (3rd internal standard) | | | | · | | |
| 4 | | | Methylene chloride (1st internal standard) | | | | | | |
| | | | Trichlorethene (2nd internal standard) | | | | | | |
| | | | Toluene (3rd internal standard) | | | | | | |

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

129/12050 INT 0301/201 LDC #: 139 28 A 1

Continuing Calibration Results Verification VALIDATION FINDINGS WORKSHEET

of 2nd Reviewer: Page: Reviewer:_

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF RRF = (A,)(C,)/(A,)(C,)

Where: ave. RRF = initial calibration average RRF RRF = continuing calibration RRF $A_{\bf k}$ = Area of compound, $A_{\bf k}$ = Area of $C_{\bf k}$ = Concentration of compound, $C_{\bf k}$ = Conce

 $A_{\rm b}=$ Area of associated internal standard $C_{\rm b}=$ Concentration of internal standard

| | | | | | Reported | Recalculated | Reported | Recalculated |
|----------|-------------|---------------------|--------------------------------------------|-----------------------|-------------|--------------|----------|--------------|
| * | Standard ID | Calibration Date | Compound (Reference Internal Standard) | Average RRF (Initial) | RRF (CC) | RRF (CC) | %D | Q% |
| _ | 406116050 | 1 / Ka / W | Methylene chloride (1st internal standard) | 0.3/74 | 0.311 | 116.0 | 6,0 | 6,0 |
| | | 12/1-1// | Trichforethene (2nd internal standard) | 3.3 gK | 3, 664 | 3.464 | 7.9 | 7, 9 |
| <u> </u> | | | Toluene (3rd internal standard) | 3,678 | 3.796 | 2796 | 4.6 | 4.6 |
| 2 | 05072764 | 1 /2 7 /12/ | Methylene chloride (1st internal standard) | 0. 25% | 0.269 | 67.0 | 5'5 | 7.7 |
| | | | Trioिमिक्सिकाe (2nd internal standard) | 2497 | 3.450 | 25. 420 | 15.1 | (ق) ا |
| | | 1 | Tallehal 3rd internal standard) | 2.826 | 3.040. | 3.041 | 7.6 | 76 |
| η σ | | | Methylene chloride (1st internal stendard) | | | | | |
| | | T · | Tichlorethene (2nd Internal standerd) | | | | | |
| | | 1 | Toluene (3rd internal standard) | | | | | |
| 4 | | | Methylene chloride (1st internal standard) | | | | | |
| | | ı | Trichlorethene (2nd internal standard) | | | | | |
| <u></u> | | ı | Toluene (3rd internal standard) | | | • | | |

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10,0% of the recalculated results. LDC #: 1398 A/ SDG #: BME 0507 /56/

VALIDATION FINDINGS WORKSHEET Surrogate Results Verification

| Page: | of / |
|---------------|------|
| Reviewer: | 274 |
| 2nd reviewer: | 0 |
| | ~ |

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found

SS = Surrogate Spiked

| Sample ID: | Surrogate Spiked | Surrogate Found | Percent Recovery Reported | Percent Recovery Recalculated | Percent Difference |
|-----------------------|---------------------|--------------------|---------------------------------|-------------------------------------|-----------------------|
| | | 1947,57 | 98 | 98 | 0 |
| Toluene-d8 | 300 | 1915.51 | 96 | 96 | |
| Bromofluorobenzene | | 1850.48 | 93 | 93 | <i>\</i> |
| 1,2-Dichloroethane-d4 | + | 1830.78 | | | |
| Dibromofluoromethane | | | | | <u> </u> |

| Sample ID: | Surrogate Spiked | Surrogate Found | Percent Recovery Reported | Percent Recovery Recalculated | Percent Difference |
|-----------------------|---------------------|--------------------|---------------------------------|-------------------------------------|-----------------------|
| | | | | | |
| Toluene-d8 | | | | | · |
| Bromofluorobenzene | | | | | |
| 1,2-Dichloroethane-d4 | | | | | |
| Dibromofluoromethane | | | | | |

| Sample ID: | Surrogate Spiked | Surrogate Found | Percent Recovery Reported | Percent Recovery Recalculated | Percent Difference |
|-----------------------|---------------------|--------------------|---------------------------------|-------------------------------------|-----------------------|
| | | | | | |
| Toluene-d8 | | | | | |
| Bromofluorobenzene | | | | | |
| 1,2-Dichloroethane-d4 | | | | | |
| Dibromofluoromethane | | | | | |

| Sample ID: | Surrogate Spiked | Surrogate Found | Percent Recovery Reported | Percent Recovery Recalculated | Percent Difference |
|-----------------------|---------------------|--------------------|---------------------------------|-------------------------------------|-----------------------|
| | 7 | | | | |
| Toluene-d8 | | | | | |
| Bromofluorobenzene | | | | | |
| 1,2-Dichloroethane-d4 | | | | | |
| Dibromofluoromethane | | | | | |

| Sample ID: | | T T T T T T T T T T T T T T T T T T T | Percent | Percent | |
|-----------------------|---------------------|---------------------------------------|----------------------|--------------------------|-----------------------|
| | Surrogate Spiked | Surrogate Found | Recovery Reported | Recovery Recalculated | Percent Difference |
| | | | | | |
| Toluene-d8 | | | | | |
| Bromofluorobenzene | | | | | |
| 1,2-Dichloroethane-d4 | | | | | |
| Dibromofluoromethane | | | | | |

| 1392A1 | 251L050 2Mg |
|--------|-------------|
| LDC #: | SDG #: |

VALIDATION FINDINGS WORKSHEET Laboratory Control Sample Results Verification

Page: of Reviewer: $\sigma V \zeta$

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA

Where: SSC = Spiked sample concentration SA = Spike added

RPD = ILCS - LCSD I * 2/(LCS + LCSD)

LCS = Laboraotry control sample percent recovery

LCSD = Laboratory control sample duplicate percent recovery

LCS ID: 468 MS 07 5 2654 A

| | Ś | ike | Spiked 8 | sample | SOT | S | CSD | Q | /CS/I | LCS/LCSD |
|---------------------|-----------|-----------|-------------------------------------|-----------------|------------------|---------|------------------|---------|----------|--------------|
| Compound |) (ug | (ug/kg) | Concentration (M_{χ}/k_{χ}) | tration (kg) | Percent Recovery | ecovery | Percent Recovery | ecovery | Ē | RPD |
| | rcs | LCSD | SOT | CSD | Reported | Recalc. | Reported | Recalc. | Reported | Becalculated |
| 1, 1-Dichloroethene | 400 | λA | Low | ŊĀ | 25 | 57 | | | | nempronocci |
| Trichloroethene | | | 433 | | puj | 104 | | | | |
| Benzene | | | 41,4 | | 110 | | | | | |
| Toluene | | | 439 | | 110 | 917 | | | | |
| Chlorobenzene | <u> </u> | - | 42 | - | 107 | 707 | | | | |
| | | | | | | | | | | ŧ |
| | | | | | | | | | | |
| | | | | | | | | | | , |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results. LDC #: |3978A|
SDG #: BMI 0507|56|

VALIDATION FINDINGS WORKSHEET Sample Calculation Verification

Page: ____of__ Reviewer: 2nd reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B) Were all reported results recalculated and verified for all level IV samples? Y N N/A

Were all recalculated results for detected target compounds agree within 10.0% of the reported results? Y/N N/A

Example: Sample I.D. # 1 1,2,4-Trimethy benzone (A.)(L)(DF) Concentration = (A_)(RRF)(V_o)(%S) Area of the characteristic ion (EICP) for the . compound to be measured Area of the characteristic ion (EICP) for the specific $= \frac{(173579)(10)^{270}}{(258)(3.547)(10)}$ A. internal standard Amount of internal standard added in nanograms ١, (ng) Relative response factor of the calibration standard. = 3.76.62 Volume or weight of sample pruged in milliliters (ml) RRF ٧. 3 380 ng/tg or grams (g). Dilution factor. Df

| f_ | - | Dilution factor. | olicable to soils and solid | · os y · eg | | ·. |
|--------|----|------------------|-----------------------------|----------------------------|------------------------------|---------------|
| s T | | matrices only. | | Reported Concentration () | Calculated Concentration () | Qualification |
| # | | Sample ID | Compound | | | |
| _ | | | | | · | |
| | | | | | | |
| | | · | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | ┼- | | | | | |
| | | | | | | |
| | _ | | | | | |
| | +- | | | | | |
| | | | | | | |
| | | | | | | |
| | + | | | | | |
| | | | | | | |
| | | | | | | |

MCB Camp Pendleton, CTO 102 Data Validation Reports LDC# 13928

Polynuclear Aromatic Hydrocarbons



Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:

Camp Pendleton, CTO 102

Collection Date:

July 12, 2005

LDC Report Date:

September 8, 2005

Matrix:

Soil

Parameters:

Polynuclear Aromatic Hydrocarbons

Validation Level:

EPA Level III & IV

Laboratory:

Alpha Analytical, Inc.

Sample Delivery Group (SDG): BMI05071561

Sample Identification

1523-SW3-10**

1523-SW3-10 Dup

1523-SW7

1523-BS6

1523-BS8**

1523-BS8MS

1523-BS8MSD

^{**}Indicates sample underwent EPA Level IV review

Introduction

This data review covers 7 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples 1523-SW3-10** and 1523-SW3-10 Dup were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples.

XVII. Field Blanks

No field blanks were identified in this SDG.

Camp Pendleton, CTO 102
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG
BMI05071561

No Sample Data Qualified in this SDG

Camp Pendleton, CTO 102
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary
- SDG BMI05071561

No Sample Data Qualified in this SDG



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Bob Janosy Attn:

Phone: (614) 424-7160 Fax: (614) 424-3667

Job#: T0102

Alpha Analytical Number: BMI05071561-01A

Client I.D. Number: 1523-SW3-10

Sampled: 07/12/05 Received: 07/15/05 Analyzed: 07/19/05

Semivolatile Organics by GC/MS EPA Method SW8270C

| | | | Reporting |
|----|------------------------|---------------|--------------|
| | Compound | Concentration | Limit |
| 1 | Naphthalene | ND / | 13,000 µg/Kg |
| 2 | Acenaphthylene | ND 1 | 13,000 µg/Kg |
| 3 | Acenaphthene | ND | 13,000 µg/Kg |
| 4 | Fluorene | ND | 13,000 µg/Kg |
| 5 | Phenanthrene | ND | 13,000 µg/Kg |
| 6 | Anthracene | ND | 13,000 µg/Kg |
| 7 | Fluoranthene | ND ND | 13,000 µg/Kg |
| 8 | Pyrene | ND | 13,000 µg/Kg |
| 9 | Benzo(a)anthracene | ND | 13,000 µg/Kg |
| 10 | Chrysene | ND | 13,000 µg/Kg |
| 11 | Benzo(b)fluoranthene | ND | 13,000 µg/Kg |
| 12 | Benzo(k)fluoranthene | ND | 13,000 µg/Kg |
| 13 | Benzo(a)pyrene | ND | 13,000 µg/Kg |
| 14 | Indeno(1,2,3-cd)pyrene | ND | 13,000 µg/Kg |
| 15 | Dibenz(a,h)anthracene | ND | 13,000 µg/Kg |
| 16 | Benzo(g,h,i)perylene | ND 🇸 | 13,000 µg/Kg |
| 17 | Surr: Nitrobenzene-d5 | 86 | %REC |
| 18 | Surr: 2-Fluorobiphenyl | 100 | %REC |
| 19 | Surr: 4-Terphenyl-d14 | 94 | %REC |

Reporting Limits were increased due to the hydrocarbons present in the sample.

ND = Not Detected

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

7/21/05 Report Date

Page I of I



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: T0102 Attn: **Bob Janosy**

Phone: (614) 424-7160 Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-02A

Client I.D. Number: 1523-SW3-10 DUP

Sampled: 07/12/05

Received: 07/15/05 Analyzed: 07/19/05

Semivolatile Organics by GC/MS EPA Method SW8270C

| | | | Reporting |
|----|------------------------|---------------|--------------|
| | Compound | Concentration | Limit |
| 1 | Naphthalene | ND / | 13,000 µg/Kg |
| 2 | Acenaphthylene | ND | 13,000 µg/Kg |
| 3 | Acenaphthene | ND | 13,000 µg/Kg |
| 4 | Fluorene | ND | 13,000 µg/Kg |
| 5 | Phenanthrene | ND | 13,000 µg/Kg |
| 6 | Anthracene | ND | 13,000 µg/Kg |
| 7 | Fluoranthene | ND | 13,000 µg/Kg |
| 8 | Pyrene | ND | 13,000 µg/Kg |
| 9 | Benzo(a)anthracene | ND | 13,000 µg/Kg |
| 10 | Chrysene Chrysene | ND | 13,000 µg/Kg |
| 11 | Benzo(b)fluoranthene | ND | 13,000 µg/Kg |
| 12 | Benzo(k)fluoranthene | ND | 13,000 µg/Kg |
| 13 | Benzo(a)pyrene | ND | 13,000 µg/Kg |
| 14 | Indeno(1,2,3-cd)pyrene | ND | 13,000 µg/Kg |
| 15 | Dibenz(a,h)anthracene | ND | 13,000 µg/Kg |
| 16 | Benzo(g,h,i)perylene | ND 🎸 | 13,000 µg/Kg |
| 17 | Surr: Nitrobenzene-d5 | 85 | %REC |
| 18 | Surr: 2-Fluorobiphenyl | 89 | %REC |
| 19 | Surr: 4-Terphenyl-d14 | 87 | %REC |

Reporting Limits were increased due to the hydrocarbons present in the sample.

ND - Not Detected

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

7/21/05 Report Date

Page 1 of 1



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201 Job#:

T0102

Attn: **Bob Janosy** Phone: (614) 424-7160

Fax:

(614) 424-3667

Alpha Analytical Number: BMI05071561-03A

Client I.D. Number: 1523-SW7

Sampled: 07/12/05

Received: 07/15/05 Analyzed: 07/19/05

Semivolatile Organics by GC/MS EPA Method SW8270C

| | Compound | Concentration | Reporting Limit |
|----|------------------------|---------------|--------------------|
| 1 | Naphthalene | ND I | 6,600 µg/Kg |
| 2 | Acenaphthylene | ND I | 6,600 µg/Kg |
| 3 | Acenaphthene | ND | 6,600 µg/Kg |
| 4 | Fluorene | ND | 6,600 µg/Kg |
| 5 | Phenanthrene | ND | 6,600 µg/Kg |
| 6 | Anthracene | ND | 6,600 µg/Kg |
| 7 | Fluoranthene | ND | 6,600 µg/Kg |
| 8 | Pyrene | ND | 6,600 µg/Kg |
| 9 | Benzo(a)anthracene | ND | 6,600 µg/Kg |
| 10 | Chrysene | ND | 6,600 µg/Kg |
| 11 | Benzo(b)fluoranthene | ND | 6,600 µg/Kg |
| 12 | Benzo(k)fluoranthene | ND | 6,600 µg/Kg |
| 13 | Benzo(a)pyrene | ND | 6,600 µg/Kg |
| 14 | Indeno(1,2,3-cd)pyrene | ND | 6,600 µg/Kg |
| 15 | Dibenz(a,h)anthracene | ND | 6,600 µg/Kg |
| 16 | Benzo(g,h.i)perylene | ND 🗸 | 6,600 µg/Kg |
| 17 | Surr: Nitrobenzene-d5 | 81 | %REC |
| 18 | Surr: 2-Fluorobiphenyl | 85 | %REC |
| 19 | Surr: 4-Terphenyl-d14 | 85 | %REC |

Reporting Limits were increased due to the hydrocarbons present in the sample.

ND = Not Detected

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

7/21/05 Report Date

Page 1 of 1



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: T0102

Attn: **Bob Janosy** Phone: (614) 424-7160

Fax:

(614) 424-3667

Alpha Analytical Number: BMI05071561-08A

Client I.D. Number: 1523-BS6

Sampled: 07/12/05

Received: 07/15/05 Analyzed: 07/19/05

Semivolatile Organics by GC/MS EPA Method SW8270C

| | | | Reporting |
|----|------------------------|---------------|-------------|
| | Compound | Concentration | Limit |
| 1 | Naphthalene | ND / | 6,600 µg/Kg |
| 2 | Acenaphthylene | ND | 6,600 µg/Kg |
| 3 | Acenaphthene | ND | 6,600 µg/Kg |
| 4 | Fluorene | ND | 6,600 µg/Kg |
| 5 | Phenanthrene | ND | 6,600 µg/Kg |
| 6 | Anthracene | ND | 6,600 µg/Kg |
| 7 | Fluoranthene | ND | 6,600 µg/Kg |
| 8 | Pyrene | ND | 6,600 µg/Kg |
| 9 | Benzo(a)anthracene | ND | 6,600 µg/Kg |
| 10 | Chrysene | ND | 6,600 µg/Kg |
| 11 | Benzo(b)fluoranthene | ND | 6,600 µg/Kg |
| 12 | Benzo(k)fluoranthene | ND | 6,600 µg/Kg |
| 13 | Benzo(a)pyrene | ND | 6,600 µg/Kg |
| 14 | Indeno(1,2,3-cd)pyrene | ND | 6,600 µg/Kg |
| 15 | Dibenz(a,h)anthracene | ND | 6,600 µg/Kg |
| 16 | Benzo(g,h,i)perylene | ND 🗸 | 6,600 µg/Kg |
| 17 | Surr: Nitrobenzene-d5 | 83 | %REC |
| 18 | Surr: 2-Fluorobiphenyl | 93 | %REC |
| 19 | Surr: 4-Terphenyl-d14 | 90 | %REC |

Reporting Limits were increased due to the hydrocarbons present in the sample.

ND = Not Detected

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Report Date

Page 1 of 1



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute 505 King Avenue Columbus, OH 43201

Job#: T0102

Alpha Analytical Number: BMI05071561-09A

Client I.D. Number: 1523-BS8

Attn: **Bob Janosy**

Phone: (614) 424-7160 Fax: (614) 424-3667

Sampled: 07/12/05 Received: 07/15/05 Analyzed: 07/19/05

Semivolatile Organics by GC/MS EPA Method SW8270C

| | | | Reporting |
|----|------------------------|---------------|--------------|
| | Compound | Concentration | Limit |
| 1 | Naphthalene | ND (| 13,000 µg/Kg |
| 2 | Acenaphthylene | ND | 13,000 µg/Kg |
| 3 | Acenaphthene | ND | 13,000 µg/Kg |
| 4 | Fluorene | ND | 13,000 µg/Kg |
| 5 | Phenanthrene | ND | 13,000 µg/Kg |
| 6 | Anthracene | ND | 13,000 µg/Kg |
| 7 | Fluoranthene | ND | 13,000 µg/Kg |
| 8 | Pyrene | ND | 13,000 µg/Kg |
| 9 | Benzo(a)anthracene | ND | 13,000 µg/Kg |
| 10 | Chrysene | ND | 13,000 µg/Kg |
| 11 | Benzo(b)fluoranthene | ND | 13,000 µg/Kg |
| 12 | Benzo(k)fluoranthene | ND | 13,000 µg/Kg |
| 13 | Benzo(a)pyrene | ND | 13,000 µg/Kg |
| 14 | Indeno(1,2,3-cd)pyrene | ND | 13,000 µg/Kg |
| 15 | Dibenz(a,h)anthracene | ND , | 13,000 µg/Kg |
| 16 | Benzo(g.h.i)perylene | ND V | 13,000 µg/Kg |
| 17 | Surr: Nitrobenzene-d5 | 81 | %REC |
| 18 | Surr: 2-Fluorobiphenyl | 103 | %REC |
| 19 | Surr: 4-Terphenyl-d14 | 99 | %REC |

Reporting Limits were increased due to the hydrocarbons present in the sample.

ND - Not Detected

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hincliman, Quality Assurance Officer Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Report Date

Page 1 of 1

| LDC #: 13928A2 | VALIDATION COMPLETENESS WORKSHEET | Date: 4/00/05 |
|-----------------------------------|-------------------------------------------------|------------------------|
| SDG #: BMI05071561 | _ Level III/IV | Page: <u></u> lof |
| Laboratory: Alpha Analytical, Inc | | Reviewer: <u> ルム</u> |
| | | 2nd Reviewer: <i>0</i> |
| METHOD: GC/MS Polynuclear | Aromatic Hydrocarbons (EPA SW 846 Method 8270C) | J |

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

| | Validation Area | | Comments |
|-------|------------------------------------------------|----------|----------------------------------------|
| l. | Technical holding times | A | Sampling dates: 7/12/05 |
| II. | GC/MS Instrument performance check | Ą | , |
| III. | Initial calibration | <u> </u> | |
| IV. | Continuing calibration | A | |
| V. | Blanks | A | |
| VI. | Surrogate spikes | A | |
| VII. | Matrix spike/Matrix spike duplicates | Α | |
| VIII. | Laboratory control samples | Ą | LCS |
| IX. | Regional Quality Assurance and Quality Control | N | |
| Χ. | Internal standards | A | |
| XI. | Target compound identification . | A | Not reviewed for Level III validation. |
| XII. | Compound quantitation/CRQLs | A | Not reviewed for Level III validation. |
| XIII. | Tentitatively identified compounds (TICs) | N | Not reviewed for Level III validation |
| XIV. | System performance | Α | Not reviewed for Level III validation. |
| XV. | Overall assessment of data | A | |
| XVI. | Field duplicates | ND | D = 1,2 |
| XVII. | Field blanks | N | |

Note:

A = Acceptable N = Not provided/applicable SW = See worksheet

ND = No compounds detected

R = Rinsate

D = Duplicate TB = Trip blank EB = Equipment blank FB = Field blank

Validated Samples: ** Indicates sample underwent Level IV validation

| | Soil | | | |
|--------|-------------------|----|----|----|
| 1 | 1523-SW3-10** p | 11 | 21 | 31 |
| 2 | 1523-SW3-10 Dup D | 12 | 22 | 32 |
| 3 | 1523-SW7 | 13 | 23 | 33 |
| 4 | 1523-BS6 | 14 | 24 | 34 |
| - 5 | 1523-BS8** | 15 | 25 | 35 |
| 6 | 1523-BS8MS | 16 | 26 | 36 |
| 7 | 1523-BS8MSD | 17 | 27 | 37 |
| 8 | MB 12657 | 18 | 28 | 38 |
| 9 | | 19 | 29 | 39 |
| 10 | | 20 | 30 | 40 |

VALIDATION FINDINGS CHECKLIST

Page:___of_;
Reviewer:_________ 2nd Reviewer: _____

Method: Semivolatiles (EPA SW 846 Method 8270C)

| Validation Area Yes No NA Findings/Comments Fechnical holding times were met. Coolin temperature criteria was met. ### GGAMS [astrument performatice check.] Were the DFTPP performance results reviewed and found to be within the specified criteria? Were all samples analyzed within the 12 hour clock criteria? ### Were all samples analyzed within the 12 hour clock criteria? ### Were all perform a 5 point calibration prior to sample enalysis? Did the inborracry perform a 5 point calibration prior to sample enalysis? Were all person relative standard deviations (KRSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs? Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used? #### Were all present relative standard deviations (KRSD) ≤ 30% and relative response factors (RRF) ≥ 0.65? ##### Committing calibration standard deviations (KRSD) ≤ 30% and relative response factors (RRF) within method criteria for all CCCs and SPCCs? Were all persont differences (XD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs? Were all persont differences (XD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs? Were all persont differences (XD) ≤ 25% and relative response factors (RRF) within method criteria for all CCCs and SPCCs? Were all persont differences (XD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs? Were all persont differences (XD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs? Were all persont differences (XD) and relative response factors (RRF) within method criteria for a click analyzed for each metrix and concentration? We are the contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet. **Were all surrogate **RRF** **Were all persons differences** **Were all persons differences** **Were all persons differences** **Were all persons differences** **Were all perso | Method: Semivolatiles (EPA SW 846 Method 8270C) | | | _ | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----|----------|-------------------|
| All technical holding times were met. Cooler temperature criteria was met. B GDMS Instrument periodizance check. Were the DFTPP performance results reviewed and found to be within the specified criteria? Were all samples analyzed within the 12 hour clock criteria? III. Initial calibrations Were all persent relative standard devietions (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs? Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used? Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used? Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used? Was a curve fit seed for evaluation? If Yes, what was the acceptance criteria used? Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used? Was a continuing calibration meet the curve fit acceptance criteria? Was a continuing calibration standard analyzed at least once every 12 hours for was a continuing calibration standard analyzed at least once every 12 hours for was a continuing calibration standard analyzed at least once every 12 hours for was a continuing calibration standard analyzed at least once every 12 hours for was a continuing calibration standard analyzed at least once every 12 hours for was a continuing calibration standard analyzed at least once every 12 hours for was a continuing calibration standard analyzed at least once every 12 hours for washin method criteria for all CCCs and SPCCs? Was a method blank analyzed for each matrix and concentration? Was there contamination in the method blanks? If yes, please see the Blanks washin the process worksheet. Was standard analyzed for each surrogates were outside OC limits, was a recensive performed to contirm SR? If or more hase neutral or acid surrogates were outside OC limits, was a recensive performed to contirm SR? If or more hase neutral or acid surrogates were outside OC limits, was a recensive performed to contirm SR? If or more h | | Yes | No | NA | Findings/Comments |
| All technical holding times were met. Cooler temperature criteria was met. B GDMS Instrument periodizance check. Were the DFTPP performance results reviewed and found to be within the specified criteria? Were all samples analyzed within the 12 hour clock criteria? III. Initial calibrations Were all persent relative standard devietions (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs? Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used? Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used? Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used? Was a curve fit seed for evaluation? If Yes, what was the acceptance criteria used? Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used? Was a continuing calibration meet the curve fit acceptance criteria? Was a continuing calibration standard analyzed at least once every 12 hours for was a continuing calibration standard analyzed at least once every 12 hours for was a continuing calibration standard analyzed at least once every 12 hours for was a continuing calibration standard analyzed at least once every 12 hours for was a continuing calibration standard analyzed at least once every 12 hours for was a continuing calibration standard analyzed at least once every 12 hours for was a continuing calibration standard analyzed at least once every 12 hours for washin method criteria for all CCCs and SPCCs? Was a method blank analyzed for each matrix and concentration? Was there contamination in the method blanks? If yes, please see the Blanks washin the process worksheet. Was standard analyzed for each surrogates were outside OC limits, was a recensive performed to contirm SR? If or more hase neutral or acid surrogates were outside OC limits, was a recensive performed to contirm SR? If or more hase neutral or acid surrogates were outside OC limits, was a recensive performed to contirm SR? If or more h | | | | | |
| Cooler temperature criteria was met. If CQRMS instrument performance etteck Were the DFTPP performance results reviewed and found to be within the specified criteria? Were all samples analyzed within the 12 hour clock criteria? If Initial calibration Did the laboratory perform a 5 point calibration prior to sample analysis? Were all persent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all COCs and SPCOS? Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used? Were all persent relative standard deviations (%RSD) a 50% and relative response factors (RRF) ≥ 0.05? Were all persent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) ≥ 0.05? Were all persent differences (%D) and relative response factors (RRF) within method criteria for all COCs and SPCOS? Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05? V. Binks Were a method blank associated with every sample in this SDG? Was a method blank associated with every sample in this SDG? Was a method blank associated or acid surrogates were outside QC limits, was a restandard to confirm %R? Were all surrogate %R within QC limits? Were all surrogate %R within QC limits? Were all surrogate %R within QC limits? Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? if no, indicate which matrix does not have an associated Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? if no, indicate which matrix does not have an associated Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? if no, indicate which matrix does not have an associated | | / | | | |
| Were the DFTPP performance results reviewed and found to be within the specified ortheria? Were all samples analyzed within the 12 hour clock criteria? Were all samples analyzed within the 12 hour clock criteria? Did the laboratory perform a 5 point calibration prior to sample analysis? Were all parcent relative standard deviations (%RSD) and relative response factors (RIFP) within method orticals for all COCs and SPCCs? Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used? Did the initial calibration met the curve fit acceptance criteria? Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RIFP) ≥ 0.05? W. Crotinuing calibration standard analyzed at least once every 12 hours for seach instrument? Were all percent differences (%D) and relative response factors (RIFP) within method orteria for all COCs and SPCCs? Were all percent differences (%D) = 25% and relative response factors (RIFP) within method orteria for all COCs and SPCCs? Were all percent differences (%D) ≤ 25% and relative response factors (RIFP) ≥ 0.05? Were all percent differences (%D) ≤ 25% and relative response factors (RIFP) within method orteria for all COCs and SPCCs? Was a method blank associated with every sample in this SDG? Was a method blank associated with every sample in this SDG? Was a method blank analyzed for each matrix and concentration? Were all surrogate %R within QC limits? Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated matrix in this SDG? If no, indicate which matrix does not have an associated matrix in this SDG? If no, indicate which matrix does not have an associated matrix in this SDG? If no, indicate which matrix does not have an associated matrix in this SDG? If no, indicate which matrix does not have an associa | | | | | |
| Were the DFTPP performance results reviewed and found to be within the specified oriteria? Were all samples analyzed within the 12 hour clock criteria? It initial calibration Did the laboratory perform a 5 point calibration prior to sample analysis? Were all percent relative standard deviations (%RSD) and relative response factors (RIFP) within method criteria for all CCCs and SPCCs? Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used? Did the initial calibration meet the curve fit acceptance criteria? Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RFF) ≥ 0.05? ### Continuing calibration Was a continuing calibration standard analyzed at least once every 12 hours for each instrument? Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs? Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05? ### Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05? ### Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05? ### Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05? ### Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05? ### Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05? #### Were all surrogate samples of the samples and relative response factors (RRF) ≥ 0.05? ##### Were all surrogate samples of the samples samples are samples and relative response factors (RRF) ≥ 0.05? ################################### | | 1 - | | | |
| Were all samples analyzed within the 12 hour clock criteria? Iii. jinist calibration | E GC/MS Instrument performance check | | | | |
| Did the laboratory perform a S point calibration prior to sample analysis? Were all percent relative standard deviations (%RSD) and relative response factors (RIF) within method criteria for all COCs and SPCCs? Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used? Did the initial calibration meet the curve fit acceptance criteria? Was all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RIF) ≥ 0.05? W. Corrunding calibration. Was a continuing calibration standard enalyzed at least once every 12 hours for each instrument? Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs? Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05? Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05? Was a method blank associated with every sample in this SDG? Was a method blank analyzed for each matrix and concentration? Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet. W. Surrugate spirate Were all surrogate %R within QC limits? If or more hase neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R? If or more has neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R? If any %R was less than 10 percent, was a reanalysis performed to confirm %R? Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated matrix in this SDG? If no, indicate which matrix does not have an associated | specified criteria? | | | | |
| Did the laboratory perform a S point calibration prior to sample analysis? Were all percent relative standard deviations (%RSD) and relative response factors (RIF) within method criteria for all COCs and SPCCs? Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used? Did the initial calibration meet the curve fit acceptance criteria? Was all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RIF) ≥ 0.05? W. Corrunding calibration. Was a continuing calibration standard enalyzed at least once every 12 hours for each instrument? Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs? Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05? Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05? Was a method blank associated with every sample in this SDG? Was a method blank analyzed for each matrix and concentration? Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet. W. Surrugate spirate Were all surrogate %R within QC limits? If or more hase neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R? If or more has neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R? If any %R was less than 10 percent, was a reanalysis performed to confirm %R? Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated matrix in this SDG? If no, indicate which matrix does not have an associated | Were all samples analyzed within the 12 hour clock criteria? | | | | |
| Did the laboratory perform a 5 point calibration prior to sample analysis? Were all percent relative standard deviations (%RSD) and relative response factors (RRP) within method criteria for all CCCs and SPCCs? Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used? Did the initial calibration meet the curve fit acceptance criteria? Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRP) ≥ 0.05? N. Continuing calibration Was a continuing calibration standard analyzed at least once every 12 hours for each instrument? Ware all percent differences (%D) and relative response factors (RRP) within method criteria for all CCCs and SPCCs? Were all percent differences (%D) ≤ 25% and relative response factors (RRP) ≥ 0.05? Was a method blank associated with every sample in this SDG? Was a method blank analyzed for each metrix and concentration? Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet. Vi. Suscipals spitions Were all surrogate %R within QC limits? If or more hase neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R? If or more hase neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R? If any %R was less than 10 percent, was a reanalysis performed to confirm %R? Vi. Matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each metrix inthis SDG? If no, indicate which matrix does not have an associated matrix in this SDG? If no, indicate which matrix does not have an associated | | | | | l |
| Were all percent relative standard devietions (SARSD) and relative response factors (RRP) within method criteria for all CCCs and SPCCs? Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used? Did the initial calibration meet the curve fit acceptance criteria? Were all percent relative standard devietions (%RSD) ≤ 90% and relative response factors (RRP) ≥ 0.05? M. Continuing calibration Was a continuing calibration standard analyzed at least once every 12 hours for each instrument? Were all percent differences (%D) and relative response factors (RRF) within method criterio for all CCCs and SPCCs? Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05? Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05? Was a method blank associated with every sample in this SDG? Was a method blank analyzed for each metrix and concentration? Was there contamination in the method blanks? If yes, please see the Blanks variedation completeness worksheet. W. Sunuquate apities: Were all surrogate %R within QC limits? If or more have neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R? If or more have neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R? W. Was all surrogate %R within QC limits? If or more have neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R? Were all metrix spike (MS) and matrix spike duplicate (MSD) analyzed for each metrix in this SDG? If no, indicate which matrix does not have an associated metrix in this SDG? If no, indicate which matrix does not have an associated metrix in this SDG? If no, indicate which matrix does not have an associated metrix in this SDG? If no, indicate which matrix and concentration there are associated metrix in this SDG? If no, indicate which matrix and concentration there are associated metrix in this SDG? | Did the laboratory perform a 5 point calibration prior to sample analysis? | / | • | | |
| Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used? Did the initial calibration meet the curve fit acceptance criteria? Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) ≥ 0.05? N. Cortinoing scilibration Was a continuing calibration standard analyzed at least once every 12 hours for each instrument? Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs? Were all percent differences (%D) ≤ 25% and relative response factors (RRF) within method blank associated with every sample in this SDG? V. Blanks Was a method blank associated with every sample in this SDG? Was a method blank analyzed for each matrix and concentration? Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet. VE Survoyate apities: Were all surrogate %R within QC limits? If or more hase neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R? If any %R was less than 10 percent, was a reanalysis performed to confirm %R? VI. Matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated matrix in this SDG? If no, indicate which matrix does not have an associated matrix in this SDG? If no, indicate which matrix does not have an associated matrix in this SDG? If no, indicate which matrix does not have an associated matrix in this SDG? If no, indicate which matrix does not have an associated matrix in this SDG? If no, indicate which matrix does not have an associated matrix in this SDG? If no, indicate which matrix does not have an associated matrix in this SDG? If no, indicate which matrix does not have an associated matrix in this SDG? | table standard deviations (%RSD) and relative response factors | / | | | |
| Did the initial calibration meet the curve fit acceptance criteria? Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) ≥ 0.05? N. Continuing calibration Was a continuing calibration standard enelyzed at least once every 12 hours for each instrument? Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs? Were all percent differences (%D) ≤ 25% and relative response factors (RRF) within method criteria for all CCCs and SPCCs? Was a method blank associated with every sample in this SDG? Was a method blank associated with every sample in this SDG? Was a method blank analyzed for each matrix and concentration? Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet. W. Suriouste splikes Were all surrogate %R within QC limits? If or more base neutral or acid surrogates were outside QC limits, was a reenalysis performed to confirm %R? If any %R was less than 10 percent, was a reanalysis performed to confirm %R? If any %R was less than 10 percent, was a reanalysis performed to confirm %R? Were a matrix splike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD, Solf / Water. | Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used? | | | | |
| Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) ≥ 0.05? N. Continuing calibration Was a continuing calibration standard analyzed at least once every 12 hours for each instrument? Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs? Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05? V. Blanks Was a method blank associated with every sample in this SDG? Was a method blank analyzed for each matrix and concentration? Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet. Vi. Surrogate spline: Were all surrogate %R within QC limits? If or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R? If any %R was less than 10 percent, was a reanalysis performed to confirm %R? Vi. Matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD, Solf / Water. | | , | | _ | |
| Was a continuing calibration standard analyzed at least once every 12 hours for each instrument? Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs? Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05? Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05? Was a method blank associated with every sample in this SDG? Was a method blank analyzed for each matrix and concentration? Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet. W. Surrogate spinors Were all surrogate %R within QC limits? If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R? If any %R was less than 10 percent, was a reanalysis performed to confirm %R? Were and yet with this SpG? (MS) and matrix spike duplicates Were and this spG? (If no, indicate which matrix does not have an associated MS/MSD, Soil / Water. | Were all percent relative standard deviations (%RSD) \leq 30% and relative response | / | 1 | | |
| Wes a continuing calibration standard analyzed at least once every 12 hours for each instrument? Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs? Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05? Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05? Was a method blank associated with every sample in this SDG? Was a method blank analyzed for each matrix and concentration? Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet. W. Surrogaes spinse Were all surrogate %R within QC limits? Were all surrogate %R within QC limits? If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R? If any %R was less than 10 percent, was a reanalysis performed to confirm %R? Were a matrix spike/Matrix spike duplicates Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water. | | | | | |
| Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs? Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05? Was a method blank associated with every sample in this SDG? Was a method blank analyzed for each matrix and concentration? Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet. W. Surveyste apimus Were all surrogate %R within QC limits? If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R? If any %R was less than 10 percent, was a reanalysis performed to confirm %R? Were a matrix spike (MS) and matrix spike duplicates Were a matrix spike (MS) and matrix spike duplicates Were a matrix spike (MS) and matrix spike duplicates Were a matrix spike (MS) and matrix spike duplicate which matrix does not have an associated MS/MSD, Soil / Water. | Was a continuing calibration standard analyzed at least once every 12 hours for | | | | |
| Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05? We blanks Was a method blank associated with every sample in this SDG? Was a method blank analyzed for each matrix and concentration? Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet. Were all surrogate %R within QC limits? Were all surrogate %R within QC limits? If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R? If any %R was less than 10 percent, was a reanalysis performed to confirm %R? Were a matrix spike (MS) and matrix spike duplicates Were a matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD, Soil / Water. | www.rll.nercent differences (%D) and relative response factors (RRF) within | \ | | | |
| Was a method blank associated with every sample in this SDG? Was a method blank analyzed for each matrix and concentration? Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet. W. Surrogate apinone Were all surrogate %R within QC limits? Were all surrogate were outside QC limits, was a reanalysis performed to confirm %R? If any %R was less than 10 percent, was a reanalysis performed to confirm %R? Were a matrix spike Matrix spike duplicates Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water. | Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ | | | | |
| Was a method blank associated with every sample in this SDG? Was a method blank analyzed for each matrix and concentration? Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet. W. Surroyate spikes Were all surrogate %R within QC limits? If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R? If any %R was less than 10 percent, was a reanalysis performed to confirm %R? Will Matrix spike/Matrix epike duplicates Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water. | | | | | |
| Was a method blank analyzed for each matrix and concentration? Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet. VI. Surrogate spikms Were all surrogate %R within QC limits? Were all surrogate %R within QC limits? If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R? If any %R was less than 10 percent, was a reanalysis performed to confirm %R? VII. Matrix spike/Matrix spike duplicates Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water. | y Blanks | - | | | |
| Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet. W. Surroyate spikes Were all surrogate %R within QC limits? If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R? If any %R was less than 10 percent, was a reanalysis performed to confirm %R? Will: Matrix spike/Matrix spike duplicates Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water. | Was a method blank associated with every sample in this court | | | | |
| validation completeness worksheet. VI. Surrogate apikes Were all surrogate %R within QC limits? Were all surrogate %R within QC limits? If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R? If any %R was less than 10 percent, was a reanalysis performed to confirm %R? VII. Matrix spike/Matrix spike duplicates Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water. | Was a method blank analyzed for each matrix and concentration: | | | | |
| Were all surrogate %R within QC limits? If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R? If any %R was less than 10 percent, was a reanalysis performed to confirm %R? VII. Matrix spike/Matrix spike duplicates Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water. | Was there contamination in the method blanks? If yes, please see the blanks validation completeness worksheet. | | | | |
| If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R? If any %R was less than 10 percent, was a reanalysis performed to confirm %R? VII. Matrix spike/Metrix spike duplicates Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water. | VI. Starogate apikas | | Т | | |
| If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R? If any %R was less than 10 percent, was a reanalysis performed to confirm %R? VII. Matrix spike/Metrix spike duplicates Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water. | Were all surrogate %R within QC limits? | <u> </u> | | | |
| If any %R was less than 10 percent, was a reanalysis performed to confirm %R? VII. Matrix spike/Matrix spike duplicates Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water. | If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R? | | | | |
| Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water. | If any %R was less than 10 percent, was a reanalysis performed to confirm %R? | | | <u> </u> | |
| Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water. | | | | | |
| | Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated | / | | | |
| | Was a MS/MSD analyzed every 20 samples of each matrix? | _ | | | |

LDC #: 3928A7 SDG #: BMI 0507156/

VALIDATION FINDINGS CHECKLIST

Page: γ of γ Reviewer: γ 2nd Reviewer:

| • 1 | Ţ., | N- | NA | Findings/Comments |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----|----|-------------------|
| Validation Area | Yes | No | NA | i manigo/oommone |
| Nere the MS/MSD percent recoveries (%R) and the relative percent differences RPD) within the QC limits? | | | | |
| AII: Laboratory control samples | | | | |
| Was an LCS analyzed for this SDG? | 1 | | | · . |
| V LCS enalyzed per extraction batch? | | | | |
| Was an LCS canalyses (RPD) within were the LCS percent recoveries (RPD) within the QC limits? | <u>بر</u> | | | |
| X. Regional Quality Assurance and Quality Control | | | - | |
| Acce performance evaluation (PE) samples performed? | | _ | | |
| Were the performance evaluation (PE) samples within the acceptance limits? | | | | |
| Level etgistlifts | | | | |
| Were internal standard area counts within -50% or +100% of the associated calibration standard? | <u> </u> | | | |
| Were retention times within \pm 30 seconds from the associated calibration | | | | |
| standard? XI. Target compound identification | | | | |
| Were relative retention times (RRT's) within ± 0.06 RRT units of the standard? | - | | | |
| Did compound spectra meet specified EPA "Functional Guidelines" criteria? | · . | | | |
| Were chromatogram peaks verified and accounted for? | | | | |
| VIL Compound quantitation/CRQLs | | | | |
| Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound? | / | | | |
| Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation? | 1/ | | | |
| XIII Tentatively identified compounds (TiCs) | | | | |
| Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum? | | | / | |
| Were relative intensities of the major ions within \pm 20% between the sample and | | | / | · |
| the reference spectra? Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)? | | / | | |
| XIV. System performance | | | | |
| System performance was tound to be acceptable. | | | l | |
| XV. Overall essessment of data: | | | | |
| Overall assessment of data was found to be acceptable. | | | | |

LDC #: |3928A2 SDG #: BMI 0507156|

VALIDATION FINDINGS CHECKLIST

Page: 7 of 3
Reviewer: TV

2nd Reviewer: 4

| Validation Area | Yes | No | NA | Findings/Comments |
|------------------------------------------------------------------------------|-----|---------|----|-------------------|
| | | | | |
| (VI: Field duplicates) Field duplicate pairs were identified in this SDG. | | | | |
| Target compounds were detected in the field duplicates. | | | 1 | |
| (VII. Field blanks | | | ļ- | |
| Field blanks were identified in this SDG. | | - | | |
| Target compounds were detected in the field blanks. | | <u></u> | | |

SDG # DMT 05 TOTAL LDC #: 19928A2

Initial Calibration Calculation Verification **VALIDATION FINDINGS WORKSHEET**

300 Page: of 2nd Reviewer: Reviewer:_

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = $(A_n)(C_n)/(A_n)(C_n)$ everage RRF = sum of the RRFs/number of standards %RSD = 100 * (S/X)

A_b = Area of essociated internal standard C_b = Concentration of internal standard X = Mean of the RRFs A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs,

| | | | | | | | The second secon | | |
|---|-------------|---------------------|------------------------------------------------------|------------------|-------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------------|
| | | | | Reported | Recalculated | Reported | Recalculated | Reported | Recalculated |
| * | Standard ID | Calibration Date | Compound (Reference Internal Standard) | RRF (40 std) | RRF (4;) std) | Average RRF (initial) | Average RRF (initial) | %RSD | %RSD |
| - | IGAL | 4/06/20 | Pheno (1st Interna standard) | | | | | - Park | |
| | | 80/50// | Naphthalene (2nd internal standard) | 1.039 | 1.039 | 11.071 | 1.071 | 3.3 | 2,3 |
| | , | | Fluorene (3rd internal standard) | 1.237 | 1.332 | 1.304 | 1.384 | 4.7 | 4.7 |
| | | , | Periodieropheno (4th internal standard) | 651.1. | 1.159 | 1.213 | 1: 2/3 | 74 | 15.4 |
| | | | Bis(2-stry/haxy/) pitrasisto (5th internal standard) | 1.278 | 1.278 | 1.917 | 1.917 | 0.1 | 6.1 |
| | | | Berzo(a)pyrene (6th Internal standard) | 824.1 | 826.1 | 1.755 | 1. 253 | 5,3 | 8.2 |
| 7 | | | Phenol (1st internal standard) | | | | | | |
| | | | Naphthalene (2nd internal standard) | | | | | | |
| | | | Fluorene (3rd internal standard) | | | | | | |
| | | | Pentachlorophend (4th internal standard) | | | | | | |
| | | , | Bis(2-ethylhexyl)phthalate (5th Internal standard) | | | | | | |
| | | | Benzo(a)pyrene (8th Internel standard) | | | | | | |
| е | | | Phenol (1st internal standard) | · | | | , | | |
| | | 1 | Naphthalene (2nd internal standard) | | | | | | |
| | , | <u>'</u> | Fluciene (3rd internal standard) | | | | | | |
| | ٠ | | Pentachlorophenol (4th internal standard) | • | • | | | | |
| | | · † | Bis(2-ethylhexyl)phthalate (5th internal standard) | | | | | | - |
| | | | Berzo(a)pyrene (6th internal standard) | | | | | | |

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10,0% of the recalculated results.

DC #: 13 928A7 SDG #: BMT 65071561

Continuing Calibration Results Verification VALIDATION FINDINGS WORKSHEET

Page: of Reviewer: 2nd Reviewer:_

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave, RHF - RRF)/ave, RRF RRF = $(A_{\mu})(C_{\mu})/(A_{\mu})(C_{\nu})$

Where: ave. RRF = initial calibration average RRF RPF = continuing calibration RRF

A_b = Area of associated internal standard C_b = Concentration of internal standard A_{κ} = Area of compound, C_{κ} = Concentration of compound,

| \parallel | , | | | | Reported | Recalculated | Reported | Hecalculated |
|-------------|---------------|-----------------------|----------------------------------------------------|-----------------------|-------------|--------------|-----------|--------------|
| * | Ct bandard ID | Calibration Date - | Compound (Reference Internal Standard) | Average RRF (Initial) | RRF (CC) | RRF (CC) | 0% | 0% |
| | | 1/4/ | Phenol (1st Internal stendard) | | | | · | · |
| - | 406/1050 | 50/(_1// | | 1.071 | 1.622 | 1,033 | 3-6 | 3.6 |
| | | | Paperal Internal American | 1396 | 1.22 | 1881 | 8-k | 3-8 |
| • | | | May My A Life Land dender | 2001 | 1 | es/·) | 5.7 | ۵,4 |
| | | , | | 1.87 | 1. 2.7.2 | ンアン | 3.4 | 3. X |
| | | | Bls(2-ett/fhexyd)prinsine.(5th internal standard) | 1,1 | 6.67 | 214 | 27.6 | アプ |
| | | , | Berzc(a)pyrene (6th Internal standard) | 7 (2) | 1 2 2 2 | | | |
| , | | | Phenol (1st internal standard) | | | | | |
| ١ | | | Naphihalene (2nd internal standard) | | | | | |
| 1 | | | Fluorene (3rd internal standard) | | | | | |
| | | | Pentachlorophenol (4th Internal standard) | - | | | | |
| 1 | , | | Bis(2-ethylhexyl)phthalate (5th internal standard) | , | | | | |
| | | | Benzo(a)pyrene (6th internal standard) | | | | | |
| ئال | | | Phenol (1st internal standard) | , | | | | |
| <u>" </u> | , , | | Naphthalene (2nd internal standard) | | | | | |
| \perp | | | Flucrene (3rd internal standard) | , | | | | |
| <u></u> | | | Pertachlorophenol (4th internal standard) | ٠ | | | | |
| | | | Bis(2-ethylhexyl)phthalate (5th internal standard) | | | | | |
| \perp | | | Berzo(a)pyrene (6th internal standard) | | | | | |
| | | | | | | | | • |

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 13928 A7 SDG #: BMT 0507 154

VALIDATION FINDINGS WORKSHEET Surrogate Results Verification

| Page:_ | lof |
|----------------|---------|
| Reviewer:_ | 374 |
| 2nd reviewer:_ | <u></u> |
| | |

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found

SS = Surrogate Spiked

| sample ID:# | Surrogate Spiked | Surrogate Found | Percent Recovery Reported | Percent Recovery Recalculated | Percent Difference |
|------------------------|---------------------|--------------------|---------------------------------|-------------------------------------|-----------------------|
| | 6240 | 5392.48 | 86 | 84 | 0 |
| Nitrobenzene-d5 | | 4241.45 | 100 | 100 | 0 |
| 2-Fluorobiphenyl | | | 94 | . 94 | 0 |
| Terphenyl-d14 | <u> </u> | 5842.72 | - / | 1 -1 | |
| Phenol-d5 | · | | - | | |
| 2-Fluorophenol | | | | | |
| 2,4,6-Tribromophenol | | | | | · |
| 2-Chlorophenol-d4 | | | | | , |
| 1,2-Dichlorobenzene-d4 | | | | | |

| sample ID: | Surrogate Spiked | Surrogate Found | Percent Recovery Reported | Percent Recovery Recalculated | Percent Difference |
|------------------------|---------------------|--------------------|---------------------------------|-------------------------------------|-----------------------|
| Nitrobenzene-d5 | | | | · | |
| 2-Fluorobiphenyl | | | | 1 | |
| Terphenyl-d14 | · | | | | |
| Phenol-d5 | | | | | |
| 2-Fluorophenol | | | | | |
| 2,4,6-Tribromophenol | | | | | |
| 2-Chlorophenol-d4 | | | | | |
| 1,2-Dichlorobenzene-d4 | | | 1 | | |

| Sample ID: | Surrogate Spiked | Surrogate Found | Percent Recovery Reported | Percent Recovery Recalculated | Percent Difference |
|------------------------|---------------------|--------------------|---------------------------------|-------------------------------------|-----------------------|
| Nitrobenzene-d5 | | | | | |
| 2-Fluorobiphenyl | | | | | |
| Terphenyl-d14 | · | | | | |
| Phenol-d5 | | | | | |
| 2-Fluorophenol | | | | | |
| 2,4,6-Tribromophenol | | | | | |
| 2-Chlorophenol-d4 | | | | | |
| 1,2-Dichlorobenzene-d4 | | | | | I |

SDG #: BINE OSOTIST! LDC #: 13978 Az

Matrix Spike/Matrix Spike Duplicates Results Verification VALIDATION FINDINGS WORKSHEET

| ot | 374 | 0 |
|--------|-----------|---------------|
| Page:_ | Reviewer: | ind Reviewer: |

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA

SSC = Spiked sample concentration SA = Spike added Where:

SC = Sample concentation

RPD = 1 MS - MSD I * 2/(MS + MSD)

MSD = Matrix spike duplicate percent recovery

MS = Matrix spike percent recovery

MS/MSD samples:

| | lids | | Sample | Spiked S | ejdma | Matrix Spike | Spike | Matrix Spike Duplicate | Duplicate | MS/MSD | Οį |
|----------------------------|----------------------|------|-------------------|---------------------------|-------------|------------------|---------|------------------------|-----------|----------|--------------|
| Compound | Pedded (* 10 / C*) | ^ | Concentration (1) | Concentration (y_A/k_A) | ration < | Percent Recovery | ecovery | Percent Recovery | ecovery | RPD | |
| | WS | MSD |) | MS | MSD | Reported | Recalc. | Reported | Recalc. | Reported | Recalculated |
| Phenol | | | | | | | | | | | |
| 2-Chlorophenol | | | | | | | | | | | |
| 1,4-Dichlorobenzene | | | | - | | | | | | | |
| N-Nitroso-di-n-propylamine | | | | | | | | | | | |
| 1,2.4-Trichlorobenzene | | | | | | | | | | | |
| 4-Chloro-3-methylphenol | | | | | | | | | | | |
| Acenaphthene | 0529 | (Sn) | ۵ | 6020 | 2002 3 | 96 | 96 | 9 8 | 99 | 8.8 | 3.0 |
| 4-Nitrophenol | | | | | | | | | | etr. | |
| 2,4-Dinitrotoluene | | - | | | | | | | | | |
| Pentachforophenol | | | | | | | | | | | |
| Pyrane | gr g | asin | 0 | or hs | 22.00 | 87 | 87 | 84 | 48 | 3.3 | 3 6 |

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

SDG #: DML OSO7 144 | Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification **VALIDATION FINDINGS WORKSHEET** LDC # 1918 A7

| TO | 3/4 | α |
|-------|-----------|--------------|
| rage: | Reviewer: | d Reviewer:_ |
| | | 2nd |

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spik

Where: SSC = Spike concentration SA = Spike added

RPD = 1 LCS - LCSD 1* 2/(LCS + LCSD)

LCS = Laboratory control sample percent recovery

LCS/LCSD samples: LCS 12657

LCSD = Laboratory control sample duplicate percent recovery

| | Spik | • | Spil | 9y | SOT | S | OSOT. | SD | TCS/FCSD | CSD |
|----------------------------|--------------------|------|--------------------------|-----------|------------------|---------|------------------|----------|----------|--------------|
| Compound | Added (Mg/Kg) | , d | Concentration (49, 1/2) | tration (| Percent Recovery | ecovery | Percent Recovery | {ecovery | RPD | Q |
| | , sol | rcsD | CCS | rcsD | Reported | Recalc. | Reported | Recalc. | Reported | Recalculated |
| Phenot | | | | | | | | | | |
| 2-Chlorophenol | | | | | | | | | | |
| 1,4-Dichlorobenzene | | | | | | | | | | |
| N-Nitroso-di-n-propylamine | | | | | | | | | | |
| 1,24-Trichlorobenzene | | | - | | | | | | | |
| 4-Chloro-3-methyiphenol | | | | | | | | | | |
| Acenaphthene | 026.7 | ΝĄ | 0 | 5280 | 58 | 44 | | | | |
| 4-Nitrophenol | | | •1 | | | • | | | | |
| 2,4-Dinitrotoluene | | | | | | | | | | |
| Pentachlorophenol | | | | , | | | | | | |
| Pyrene | ويمرع | NA | a | 4950 | 79 | 7.9 | | | | |

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

| LDC | #: | 13928A7 |
|-----|----|----------|
| SDG | | 15 GIST. |

VALIDATION FINDINGS WORKSHEET Sample Calculation Verification

| Page: | _of | |
|---------------|-----|----|
| Reviewer: | J | ru |
| 2nd reviewer: | 9 | |

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

| Υ | N | <u>N/A</u>) |
|----------------|---|--------------|
| \overline{Y} | N | N/A// |
| _ | | |

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

| 0 | | n = (A)(1)(V)(DF)(2.0) | Example: | * * | | | | • |
|----------------|------------|--------------------------------------------------------------------------|------------|-----|----|---------|----|----|
| A _x | = | Area of the characteristic ion (EICP) for the compound to be measured | Sample I.D | | ND | | | |
| A _h | = , | Area of the characteristic ion (EICP) for the specific internal standard | 0 | V | λſ | |)(|)(|
| i, | ÷ | Amount of internal standard added in nanograms (ng) | Conc. = (|)(|)(|)(|)(|) |
| V. | = | Volume or weight of sample extract in milliliters (ml) or grams (g). | _ | | | | | • |
| V. | = | Volume of extract injected in microliters (ul) | _ | | | | | , |
| V, | = | Volume of the concentrated extract in microliters (ul) | | | | | | |
| Df | _ | Dilution Factor. | | | | | | • |
| % S | = | Percent solids, applicable to soil and solid matrices only. | | • | | | | |
| 2.0 | = | Factor of 2 to account for GPC cleanup | | | | | | |

| .0 = | Factor of 2 to accou | ant for GPC clearup | | | | |
|---------------|----------------------|---------------------|---|----------------------------------|------------------------------------|---------------|
| | | Compound | | Reported Concentration () | Calculated Concentration () | Qualification |
| <i>#</i> | Sample ID | Compound | | | | |
| | • | | 1 | | | |
| _ | , | | | | | |
| - | | | | | | |
| | | | | | | |
| | | | | | | • |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | • |
| | | | | | | |
| | | | | | | |
| $\neg \vdash$ | | | | | | |
| | | | | | | |
| - | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| _ | | | | | | |
| | | | | | | |
| | | | | | | |

MCB Camp Pendleton, CTO 102 Data Validation Reports LDC# 13928

TPH as Extractables



Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:

Camp Pendleton, CTO 102

Collection Date:

July 12 through July 13, 2005

LDC Report Date:

September 4, 2005

Matrix:

Soil

Parameters:

Total Petroleum Hydrocarbons as Extractables

Validation Level:

EPA Level III & IV

Laboratory:

Alpha Analytical, Inc.

Sample Delivery Group (SDG): BMI05071561

Sample Identification

1523-SW3-10**

1523-SW3-10 Dup

1523-SW7

1523-SW8-10

1523-SW11-10

1523-BS1-12

1523-BS4-13

1523-BS6

1523-BS8**

1523-SW1-10

1523-SW2-10

1523-SW9

1523-SW10

1523-BS2-12

1523-BS3-13

1523-BS5

1523-BS7

1523-SW7MS

1523-SW7MSD

^{**}Indicates sample underwent EPA Level IV review

Introduction

This data review covers 19 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 for Total Petroleum Hydrocarbons (TPH) as Extractables.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for all compounds were less than or equal to 20.0%.

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as extractable contaminants were found in the method blanks.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were not within QC limits. Since the sample concentration was greater than the spiked concentration, no data were qualified.

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

V. Target Compound Identification

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

VI. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

VII. System Performance

The system performance was acceptable for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

VIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

IX. Field Duplicates

Samples 1523-SW3-10** and 1523-SW3-10 Dup were identified as field duplicates. No total petroleum hydrocarbons as extractables were detected in any of the samples with the following exceptions:

| | Concentra | tion (mg/Kg) | |
|---------------|---------------|-----------------|-----|
| Compound | 1523-SW3-10** | 1523-SW3-10 Dup | RPD |
| TPH as diesel | 2300 | 2100 | 9 |
| TPH as oil | 530 | 550 | 4 |

X. Field Blanks

No field blanks were identified in this SDG.

Camp Pendleton, CTO 102
Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG
BMI05071561

No Sample Data Qualified in this SDG

Camp Pendleton, CTO 102 Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG BMI05071561

No Sample Data Qualified in this SDG



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute 505 King Avenue Columbus, OH 43201

Attn: Bob Janosy Phone: (614) 424-7160 Fax: (614) 424-3667

Date Received: 07/15/05

Job#: T0102

Total Petroleum Hydrocarbons - Extractable (TPH-E) EPA Method SW8015B/DHS LUFT Manual

| | | Parameter | Concentrat | ion | Reporting | Date | Date | |
|-------------|-----------------|----------------|------------|-----|-----------|----------|----------|--|
| | • | | | | Limit | Sampled | Analyzed | |
| Client ID: | 1523-SW3-10 | TPH-E (Diesel) | 2,300 | , | 5.0 mg/Kg | 07/12/05 | 07/19/05 | |
| Lab ID: | BMI05071561-01A | TPH-E (Oil) | 530 | RG | 10 mg/Kg | 07/12/05 | 07/19/05 | |
| | | Surr: Nonane | 61 | | %REC | 07/12/05 | 07/19/05 | |
| Client ID: | 1523-SW3-10 DUP | TPH-E (Diesel) | 2,100 | | 5.0 mg/Kg | 07/12/05 | 07/19/05 | |
| Lab ID: | BMI05071561-02A | TPH-E (Oil) | 550 | RG | 10 mg/Kg | 07/12/05 | 07/19/05 | |
| | | Surr: Nonane | 97 | | %REC | 07/12/05 | 07/19/05 | |
| Client ID: | 1523-SW7 | TPH-E (Diesel) | 1,400 | | 5.0 mg/Kg | 07/12/05 | 07/19/05 | |
| Lab ID: | BMI05071561-03A | TPH-E (Oil) | 390 | RG | 10 mg/Kg | 07/12/05 | 07/19/05 | |
| | | Surr: Nonane | 104 | | %REC | 07/12/05 | 07/19/05 | |
| Client ID: | 1523-SW8-10 | TPH-E (Diesel) | ND | V | 5.0 mg/Kg | 07/13/05 | 07/19/05 | |
| Lab ID: | BMI05071561-04A | TPH-E (Oil) | ND | V | 10 mg/Kg | 07/13/05 | 07/19/05 | |
| | | Surr: Nonane | 97 | | %REC | 07/13/05 | 07/19/05 | |
| Client ID: | 1523-SW11-10 | TPH-E (Diesel) | 2,300 | | 5.0 mg/Kg | 07/13/05 | 07/19/05 | |
| Lab ID: | BMI05071561-05A | TPH-E (Oil) | 600 | RG | 10 mg/Kg | 07/13/05 | 07/19/05 | |
| | | Surr: Nonane | 50 | | %REC | 07/13/05 | 07/19/05 | |
| Client ID: | 1523-BS1-12 | TPH-E (Diesel) | 2,000 | | 5.0 mg/Kg | 07/12/05 | 07/19/05 | |
| Lab ID: | BMI05071561-06A | TPH-E (Oil) | 520 | RG | 10 mg/Kg | 07/12/05 | 07/19/05 | |
| | | Surr: Nonane | 50 | | %REC | 07/12/05 | 07/19/05 | |
| Client ID: | 1523-BS4-13 | TPH-E (Diesel) | 2,500 | | 5.0 mg/Kg | 07/12/05 | 07/19/05 | |
| Lab ID: | BMI05071561-07A | TPH-E (Oil) | 600 | RG | 10 mg/Kg | 07/12/05 | 07/19/05 | |
| | | Surr: Nonane | 53 | | %REC | 07/12/05 | 07/19/05 | |
| Client ID : | 1523-BS6 | TPH-E (Diesel) | 1,600 | | 5.0 mg/Kg | 07/12/05 | 07/19/05 | |
| Lab ID: | BMI05071561-08A | TPH-E (Oil) | 440 | RG | 10 mg/Kg | 07/12/05 | 07/19/05 | |
| | | Surr: Nonane | 100 | | %REC | 07/12/05 | 07/19/05 | |
| Client ID: | 1523-BS8 | TPH-E (Diesel) | 2,800 | | 5.0 mg/Kg | 07/12/05 | 07/19/05 | |
| Lab ID: | BMI05071561-09A | TPH-E (Oil) | 660 | RG | 10 mg/Kg | 07/12/05 | 07/19/05 | |
| | | Surr: Nonane | 115 | | %REC | 07/12/05 | 07/19/05 | |
| Client ID: | 1523-SW1-10 | TPH-E (Diesel) | 2,100 | | 5.0 mg/Kg | 07/12/05 | 07/19/05 | |
| Lab ID: | BMI05071561-10A | TPH-E (Oil) | 460 | RG | 10 mg/Kg | 07/12/05 | 07/19/05 | |
| | | Surr: Nonane | 108 | | %REC | 07/12/05 | 07/19/05 | |
| | | | | | | | / | |

Falalos



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

| Client ID: | 1523-SW2-10 | TPH-E (Diesel) | 1,200 | | 5.0 mg/Kg | 07/12/05 | 07/20/05 |
|-------------|-----------------|----------------|-------|----|-----------|----------|----------|
| Lab ID: | BMI05071561-11A | TPH-E (Oil) | 300 | RG | 10 mg/Kg | 07/12/05 | 07/20/05 |
| | | Surr: Nonane | 91 | | %REC | 07/12/05 | 07/20/05 |
| Client ID : | 1523-SW9 | TPH-E (Diesel) | 7.8 | | 5.0 mg/Kg | 07/13/05 | 07/20/05 |
| Lab ID: | BMI05071561-12A | TPH-E (Oil) | ND | N | 10 mg/Kg | 07/13/05 | 07/20/05 |
| | | Surr: Nonane | 96 | | %REC | 07/13/05 | 07/20/05 |
| Client ID: | 1523-SW10 | TPH-E (Diesel) | ND | V | 5.0 mg/Kg | 07/13/05 | 07/20/05 |
| Lab ID: | BMI05071561-13A | TPH-E (Oil) | ND | 1 | 10 mg/Kg | 07/13/05 | 07/20/05 |
| | | Surr: Nonane | 99 | | %REC | 07/13/05 | 07/20/05 |
| Client ID: | 1523-BS2-12 | TPH-E (Diesel) | 310 | | 5.0 mg/Kg | 07/12/05 | 07/20/05 |
| Lab ID: | BMI05071561-14A | TPH-E (Oil) | 83 | RG | 10 mg/Kg | 07/12/05 | 07/20/05 |
| | | Surr: Nonane | 98 | | %REC | 07/12/05 | 07/20/05 |
| Client ID: | 1523-BS3-13 | TPH-E (Diesel) | 330 | | 5.0 mg/Kg | 07/12/05 | 07/20/05 |
| Lab ID: | BMI05071561-15A | TPH-E (Oil) | 81 | RG | 10 mg/Kg | 07/12/05 | 07/20/05 |
| | | Surr: Nonane | 56 | | %REC | 07/12/05 | 07/20/05 |
| Client ID: | 1523-BS5 | TPH-E (Diesel) | 610 | | 5.0 mg/Kg | 07/12/05 | 07/20/05 |
| Lab ID: | BMI05071561-16A | TPH-E (Oil) | 150 | RG | 10 mg/Kg | 07/12/05 | 07/20/05 |
| | | Surr: Nonane | 97 | | %REC | 07/12/05 | 07/20/05 |
| Client ID: | 1523-BS7 | TPH-E (Diesel) | 2,600 | | 5.0 mg/Kg | 07/13/05 | 07/20/05 |
| Lab ID: | BMI05071561-17A | TPH-E (Oil) | 500 | RG | 10 mg/Kg | 07/13/05 | 07/20/05 |
| | | Surr: Nonane | 128 | | %REC | 07/13/05 | 07/20/05 |
| | | | | | | | |

G = Compounds outside the range of diesel have varying amounts of recovery.

ND = Not Detected

Roger Scholl Kandy Salma Dalta Ambur Roger L. Scholl, Ph.D., Laboratory Director · Randy Gardner, Laboratory Manager · · Walter Hinchman, Quality Assurance Officer Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Report Date

R = Reported oil concentration may include some undifferentiated additional lighter-end hydrocarbons.

| LDC #: 13928A8 | VALIDATION COMPLETENESS WORKSHEET | Date: <u>4 /6\ /6\$</u> |
|-------------------------------|-----------------------------------|----------------------------|
| SDG #: BMI05071561 | Level III/IV | Page: <u>\</u> of <u>\</u> |
| Laboratory: Alpha Analytical, | Inc. | Reviewer: <u>3VC</u> |
| | | 2nd Reviewer: |
| METHOD: GC TPH as Eytra | ctables (FPA SW 846 Method 8015) | <i>y</i> - |

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

| | Validation Area | | Comments |
|-------|--------------------------------------|----|----------------------------------------|
| I. | Technical holding times | Α | Sampling dates: 7/12-13/05 |
| lla. | Initial calibration | A | |
| IIb. | Calibration verification | A | |
| III. | Blanks | A | |
| IVa. | Surrogate recovery | Α | |
| IVb. | Matrix spike/Matrix spike duplicates | SW | |
| IVc. | Laboratory control samples | A | LCS |
| V. | Target compound identification | A | Not reviewed for Level III validation. |
| VI. | Compound Quantitation and CRQLs | A | Not reviewed for Level III validation. |
| VII. | System Performance | A | Not reviewed for Level III validation. |
| VIII. | Overall assessment of data | A | |
| IX. | Field duplicates | SW | b = 1,2 |
| X. | Field blanks | N | |

| Note: A = Acceptable N = Not provided/applicable SW = See worksheet Soi | FB = Field blank | TB = Trip blank EB = Equipment blank |
|-------------------------------------------------------------------------|------------------------------------------|-----------------------------------------|
| Validated Samples: ** Indica | ates sample underwent Level IV validatio | on |
| + | 1 - | - |

| 1 | 1523-SW3-10** D | 11 | 1523-SW2-10 | 21 | MBLK-1267/ | 31 | |
|-------------------|-------------------|---------|-------------|----|------------|----|---|
| 1 2 | 1523-SW3-10 Dup D | † 12 | 1523-SW9 | 22 | | 32 | |
| 3 | 1523-SW7 | 13 | 1523-SW10 | 23 | | 33 | |
| 4 | 1523-SW8-10 | † 14 | 1523-BS2-12 | 24 | | 34 | |
| + 5 | 1523-SW11-10 | † 15 | 1523-BS3-13 | 25 | | 35 | |
| 1 6 | 1523-BS1-12 | + 16 | 1523-BS5 | 26 | | 36 | |
| † 7 | 1523-BS4-13 | † 17 | 1523-BS7 | 27 | | 37 | · |
| 1 8 | 1523-BS6 | 18 | 1523 SW7MS | 28 | | 38 | |
| † 9 | 1523-BS8** | 19 | 1523-SW7MSD | 29 | | 39 | |
| † 10 | 1523-SW1-10 | 20 | | 30 | | 40 | • |

| Notes: | | |
|--------|--|-----------------|
| | | |
| | | |

VALIDATION FINDINGS CHECKLIST

Page: __of_> Reviewer: _____ 2nd Reviewer: _____

| Method: GC HPLC Validation Area | Yes | No | NA | Findings/Comments |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------------|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A CONTRACTOR OF THE SECOND | | | | The second secon |
| Technical holding times | 1 | | | |
| I technical holding times were met. | 1 | | | |
| ooler temperature criteria was met. Innital calibration | | | | |
| id the laboratory perform a 5 point calibration prior to sample analysis? | / | | | |
| lo trie raboratory personner. /as a linear fit used for evaluation? If yes, were all percent relative standard eviations (%RSD) < 20%? | / | | | |
| as a curve fit used for evaluation? If Yes, what was the acceptance criteria | | / | | |
| sed? id the initial calibration meet the curve fit acceptance criteria? | | | | |
| Vere the RT windows properly established? | | F. State | esterna (na) Participa | |
| Continuing calibration: What type of continuing calibration calculation was performed? | | | | |
| %R Vas a continuing calibration analyzed daily? | 1 | | | |
| Vere all percent differences (%D) < 15%.0 or percent recoveries 85-115%? | | | | |
| Vere all the retention times within the acceptance windows? | | | | |
| Vere all the retention times / Blanks | | | | |
| / Blanks Vas a method blank associated with every sample in this SDG? | | | | |
| Vas a method blank associated the variety and concentration? | | | | · |
| Was a method blank analyzed to contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet. | | | | |
| | | | | |
| (I. Surrogate spikes | | | | |
| Nere all surrogate %R within the QC limits? f the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R? | | | 1 | |
| f any %R was less than 10 percent, was a reanalysis performed to confirm %R? | | <u> </u> | \perp | |
| VII. Matrix spike/Matrix spike duplicates | | | | |
| Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated | | | | |
| MS/MSD. Soil / Water. | 7 | | | |
| Was a MS/MSD analyzed every 20 samples of each matrix? | T | | 1 | |
| Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits? | | | <u> </u> | |
| VIII. Laboratory control samples | T - | <i>y</i> – | Т | |
| Was an LCS analyzed for this SDG? | 1 / | 1 | 1 | |

LDC #: 1392848 SDG #: \$110507156/

VALIDATION FINDINGS CHECKLIST

Page: ____of__*
Reviewer: ______
2nd Reviewer: ______

| | Yes | No | NA | Findings/Comments |
|-----------------------------------------------------------------------------------------------------------------------------------------|--------------|------------------------------------------|-----------|---------------------------------------|
| Validation Area | Yes | NO | 14/ | |
| Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits? | | | • | |
| IX. Regional Quality Assurance and Quality Control | T T | | | |
| Were performance evaluation (PE) samples performed? | | - | | |
| Were the performance evaluation (PE) samples within the acceptance limits? | ***** | | | |
| X Target compound identification Were the retention times of reported detects within the RT windows? | | | | |
| xi Compound quantitation/CRQLs | *** T − / | , | | |
| Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation? | | | -401-5001 | |
| and dry weight lactors depression. XII. System performance | .;;;;;; T | | | T T T T T T T T T T T T T T T T T T T |
| System performance was found to be acceptable. | | | | |
| XIII. Overall assessment of data | -23/2 T / | T T | Ī | |
| Overall assessment of data was found to be acceptable. | <u> /</u> | | | |
| XIV. Field duplicates | TZ | | Ī | |
| Were field duplicate pairs identified in this SDG? | + | - | ╁ | |
| Were target compounds idetected in the field duplicates? | 14 | • • • • • • • • • • • • • • • • • • | l Uzrā | |
| XV. Field blanks | 1 | Γ7 | T | |
| Were field blanks identified in this SDG? | - | <u> </u> | 1 | |
| Were target compounds detected in the field blanks? | | <u></u> | | |

PINT OSOTING LDC #: 19928 A8 SDG#

VALIDATION FINDINGS WORKSHEET Matrix Spike/Matrix Spike Duplicates

28 Page: __of_ 2nd Reviewer: Reviewer:

METHOD: CC HPLC
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Vere a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?

V N/A

Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

V N/A

Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

| | | | N. | | Men | | NS N | | |
|--------|--------|----------|-------------------|----------|--------------|----------|------------------------------------------|--------------------|----------------|
| S | ISD ID | Compound | MS %R (Limits) | its) | MSC (Limits) | | RPD (Limits) | Associated Samples | Qualifications |
| \sim | 18/19 | Direct | 0 | (53-153) | 0 (53- | (83-13) | () | 3 | No rue |
| ŀ | | |) | (|) | (| () | * | (parent conc. |
| | | |) | ^ | Ú | <u> </u> | () | | >2X Spike ant) |
| | | |) | (|) | (| () | | |
| | | |) |) |) | (| () | | |
| ıl | | |) | î | J | î | `` | | |
| | | | | - | | _ | () | | |
| | | | | r | | ^ | () | | |
| | | |) | (|) | (| () | | |
| | | | | ^ | J | ſ, | () | | |
| l | | |) | (| v | (| () | | |
| | | |) | |) | | () | | - |
| | | |) | (|) | (| () | | |
| | | |) | () |) |) | () | | |
| | | |) | () |) | î | () | | |
| | | |) | () |) | (| () | | |
| | | |) | () |) | (| () | | |
| | | | | | J | | | | |
| | | <i>3</i> | | () |) | Û | () | | |
| | | |) | (|) |) (| () | | |
| | | | | () |) |) | () | | |
| | | | | () |) |) (| () | | |
| - 1 | | | | | J | 1 | () | | |
| ı | | | -' | |) | <u> </u> | () | | |
| | | | | () |) | 1 | 1 | | |

LDC#: 13928A8 SDG#: PMI0507(56/

VALIDATION FINDINGS WORKSHEET

Field Duplicates

Page: Lof

375

Reviewer: 3/12 2nd reviewer: S

 METHOD:
 CG
 HPLC

 Y N N/A
 Were field duplicate pairs identified in this SDG?

 Y/N N/A
 Were target compounds detected in the field duplicate pairs?

| pipodipo | | Concentration ("") [Kg] | N simil | Darent-chily (All Samples |
|----------|-------|-------------------------|---------|----------------------------|
| | • | ٧ | | Target Only 7 All Campres |
| | 2 300 | 2100 | ф | |
| 5 | 065 | 550 | 4 | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| | Concentration (| %RPD | Qualification |
|-----------------------------------------------|-----------------|-------|-----------------------------|
| Compound | | Limit | ratelli Olity / All Camples |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| COLUMN AND AND AND AND AND AND AND AND AND AN | | | |

SDG #: BMT 0507156 LDC# 13928 A8

Initial Calibration Calculation Verification VALIDATION FINDINGS WORKSHEET

Page: of 2nd Reviewer: Reviewer:_

METHOD: GC_

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

average CF = sum of the CF/number of standards %RSD = 100 * (S/X) CF = A/C

A = Area of compound, C = Concentration of compound, S = Standard deviation of the CF X = Mean of the CFs

| 2 Calibration Date 2 2 3 3 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 | | Reported | Recalculated | Reported | Recalculated | Reported | Recalculated |
|------------------------------------------------------------|----------|-------------------|------------------|----------------------------------------------|---------------------------|----------|--------------|
| 1.747 | Compound | CF (1010) std) | CF (1070 std) | Average CF (initial) | Average CF (initial) — | %RSD | %RSD |
| 1 | Diezel | 1.3602 e.4 | 1.201584e-4 | 1.9602 e.4 1.801584e-4 1.9471 e-4 1.9471 e-4 | 1.3471 0-4 | 181 | 28.9 |
| 3 8 | | | - | | | | |
| 33 | | | | | | | |
| 3 | | | | | | | |
| 3 | | | | | | | |
| 3 | | | | | | | |
| | | | | | | | |
| | | | | : | | | |
| | | | | | | | , |
| 4 | | | | | | | |
| | | | | | - | : | |
| | | | | | | | |

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

| | <u>5</u> |
|-------------|----------|
| 48 | 1050 |
| 9281 | DMI |
|)C #: [] |)G#: |
| DC #: 17928 | 3#: BM |

VALIDATION FINDINGS WORKSHEET Continuing Calibration Results Verification

| 1 of 1 | 3//2 | d |
|--------|----------|---------------|
| Page: | Reviewer | 2nd Reviewer: |

| 4 |
|---------------------|
| $\overline{\Omega}$ |
| Ŧ |
| `` |
| ည္ပ |
| \circ |
| ö |
| \overline{a} |
| ¥ |
| 二 |
| ш |
| == |

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
 Where: ave. CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

| | | | | | Reported | Recalculated | Reported | Recalculated |
|---|-------------|---------------------|----------|--------------------------------|-----------------|-----------------|----------|--------------|
| # | Standard ID | Calibration Date | Compound | Average CF(Ical)/ CCV Conc. | CF/Conc. CCV | CF/Conc. CCV | 36€ | %R |
| - | 2 | 39 7/19/05 | Diesel | ast | 274.49 | 274,49 | 169.79 | 66.79 |
| 2 | | | | | · | | | |
| | | | | | | | | |
| m | | | | | | | | |
| 4 | | | | | | | | |
| | | | | · | | | | |

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

SDG# ping osogial LDC #: 139 28 AS

VALIDATION FINDINGS WORKSHEET Surrogate Results Verification

Page: of)

METHOD: __GC__ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Sample ID: #

Where: SF = Surrogate Found SS = Surrogate Spiked

| Surrogate | Column/Detector | Surrogate Spiked | Surrogate | Percent | Percent | Percent |
|-----------|-----------------|---------------------|-----------|----------|--------------|-----------|
| | | | | Reported | Recalculated | Dinerence |
| Vinane | 180 | 100 | 2265.03 | 19 | - 10 | 0 |
| | | | 3 | | | + |
| | | | | | | |
| | | | | | | |

Sample ID:

| Column/Detect |
|---------------|
| |
| |
| |
| |

Sample ID:

| 6 | | | | I |
|-----------------------|--------------|---|--|---|
| Percent Difference | | | | |
| Percent Recovery | Recalculated | | | |
| Percent Recovery | Reported | | | |
| Surrogate Found | | | | |
| Surrogate Spiked | | 1 | | |
| Column/Detector | | | | |
| Surrogate | | | | |

PINFOSOTIAL LDC#. 19978A8 SDG#:_

Matrix Spike/Matrix Spike Duplicates Results Verification VALIDATION FINDINGS WORKSHEET

2nd Reviewer: Reviewer: 174 Page: of /

METHOD: ____Gc ___HPLC
The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA

Where

SC = Sample concentration

RPD =(({SSCMS - SSCMSD}*2) / (SSCMS + SSCMSD))*100

SSC = Spiked sample concentration SA = Spike added MS = Matrix spike

MSD = Matrix spike duplicate

MS/MSD samples:

| 1 | | | Spike | ke . | Sample | Spike Sample | Sample | Matrix | Matrix spike | Matrix Spike Duplicate | Duplicate | MS/MSD | SD |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-----------|-------|-------------|---------------|--------------|-----------------|-----------|--------------|------------------------|-----------|----------|---------|
| MS MS MS MS MS MS MS MS | Compound | | (M)g | led (cs) | (17% /(e.g.) | | Wration (En) | Percent F | Recovery | Percent R | ecovery | RP | ۵ |
| ne (8015) pp 190 1920 -7q 0 -57 0 2.0 2 0 ne (80218) pp 190 1920 -7q 0 -57 0 2.0 2 0 2 0 2.0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 | | | MS | MSD |) | | | Reported | Recalc. | Reported | Recalc. | Reported | Recalc. |
| Figure F | | 15) | | | | | , | | | | | | |
| ne (RSK475) Percentage (RSK475) Percentage | | 15) | (Qs | 001 | 8761 | 1290 | 1320 | | 0 | -57 | 0 | | 23 |
| He (RSK-175) | | 21B) | | | | | | | | | | | |
| (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (8151) (| | SK-175) | | | | | | | | | | | |
| thalene (8310) Company Company <th< td=""><td></td><td>51)</td><td></td><td></td><td>·</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<> | | 51) | | | · | | | | | | | | |
| thalene (8310) Common region | | 51) | | | | | | | | | | | |
| acene (8310) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (8330) (| | 310) | | | | | | | , | | | | |
| (8330) Frinitrotoluene (8330) <th< td=""><td></td><td>10)</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<> | | 10) | | | | | | | | | | | |
| | | 330) | | | · | | | | | | | | |
| | 2,4,6-Trinitrotolue | ne (8330) | | | | , | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | • | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | • | | | | |

10.0% of the recalculated results.

| | Laborato |
|---------|-------------|
| 13928A8 | PINTOSOTIA! |
| LDC #: | SDG # |

VALIDATION FINDINGS WORKSHEET

bry Control Sample/Laboratory Control Sample Duplicates Results Verification

| Page: of / | Reviewer: 0/2 | 2nd Reviewer:Q |
|------------|---------------|----------------|
| | on | |

GC HPLC METHOD: The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

Where %Recovery = 100 * (SSC - SC)/SA

SSC = Spiked sample concentration SA = Spike added LCS = Laboratory Control Sample

SC = Sample concentration

RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: $\mathcal{U}_S - |\mathcal{U}_{7}|$

| | | Spike | Sample | Spike | Sample | FOS | | rcsp | | rcs/rcsd | SD |
|------------------------------|-----|-----------------|--------|-------|----------------------------|------------------|---------|------------------|---------|----------|---------|
| Compound | | Added mg/kg) | Conc. | Sonce | Concentration (mg/たの) | Percent Recovery | scovery | Percent Recovery | covery | RPD | |
| | rcs | s rcsp |) | rcs | CCSD | Reported | Recalc. | Reported | Recalc. | Reported | Recalc. |
| Gasoline (8015) | | | | | - | | | | | | |
| Diesel (8015) | 160 | NA | a | 801 | NA | 801 | 1 08 | | | | |
| Berizene (8021B) | | | | | | | | | | | |
| Methane (RSK-175) | | | | | | | | | | | |
| 2,4-D (8151) | | | | | | | | | | | |
| Dinoseb (8151) | | | | | | | | | | | |
| Naphthalene (8310) | | | | | | | | | | · | |
| Anthracene (8310) | | | | | | | | | | | |
| HMX (8330) | | | | | | | | ٠ | | , | |
| 2,4,6-Trinitrotoluene (8330) | 6 | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

BMILDS071561 LDC#: 13428 A8 SDG#:

VALIDATION FINDINGS WORKSHEET Sample Calculation Verification

2 Page: 1 of 1 Reviewer:

2nd Reviewer:

| _ | HPLC |
|---|---------|
|) | _ 00 _ |
| | METHOD: |

Were all recalculated results for detected target compounds agree within 10% of the reported results? Were all reported results recalculated and verified for all level IV samples? Y N/A

| (A)(Fv)(Df) | (RF)(Vs or Ws)(%S/100) |
|----------------|------------------------|
| Concentration= | (RF)(Vs or |

A= Area or height of the compound to be measured Fv= Final Volume of extract Df= Dilution Factor

RF= Average response factor of the compound in the Initial calibration Vs= Initial volume of the sample Ws= Initial weight of the sample %S= Percent Solld

Example:

Sample ID. #

Compound Name

Diesel

(16901017) (1.34712-4) Concentration = 2 2300 ms/kg

| | | | Reported | Receivilated Results | |
|-----------|-----------|----------|------------------|----------------------|----------------|
| * | Sample ID | Compound | Concentrations (| Concentrations | Qualifications |
| <u></u> | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| Comments: | ients: | | | | |

Billing Information:

505 King Avenue

Columbus, OH 43201

Battelle Memorial Institute 505 King Avenue

Columbus, OH 43201

Report Attention:

CC Report: Bob Janosy

CHAIN-OF-CUSTODY RECORD

Alpha Analytical, Inc.

255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778 TEL: (775) 355-1044 FAX: (775) 355-0406

Bob Janosy

FAX: TEL: (614) 424-3667 (614) 424-7160 ×

EMail janosyr@battelle.org

Job : T0102

CAAMEND Page: 1 of 2

WorkOrder: BMI05071561

Report Due By: 5:00 PM On: 22-Jul-05

EDD Required: Yes

Sampled by: Scott Lowe

Cooler Temp: 4°C

Date Printed:

190907 Client's COC #: 6904/6905 19-Jul-05

QC Level: DS3 = DOD QC Required : Final Rpt, MBLK, LCS, MS/MSD With Surrogates

| sample label date/footage difers from chain , 1523-BS8- 13', 7/13 , no footage on encores | 8260/MTBE_ C | TPH/E_C | PNA/PAH | OI. | 0 5 | Ŋ | 07/12/05 15:55 | SO | 1523-BS8 | BMI05071561-09A |
|----------------------------------------------------------------------------------------------------|-------------------------|---------|---------|--------|--------|----------------|-------------------|-------|-------------------|-----------------|
| | 8260/MTBE_ C | TPH/E_C | PNA/PAH | | 0 5 | 51 | 07/12/05 15:00 | SO | 1523-BS6 | BMI05071561-08A |
| | 8260/MTBE_ C | TPH/E_C | | | 5 | 4 | 07/12/05 12:45 | SO | 1523-BS4-13 | BMI05071561-07A |
| No footage noted on encores | 8260/MTBE_ C | TPH/E_C | | | 0 5 | 4 | 07/12/05 10:03 | so | 1523-BS1-12 | BMI05071561-06A |
| | 8260/MTBE_ C | TPH/E_C | | 0. | 0 5 | 4 | 07/13/05 17:00 | SO | 1523-SW11-10 | BMI05071561-05A |
| | 8260/MTBE_ C | TPH/E_C | | | 0 5 | 4 | 07/13/05 12:05 | SO | 1523-SW8-10 | BMI05071561-04A |
| | 8260/MTBE_ C | TPH/E_C | PNA/PAH | | 0 5 | Ω | 07/12/05 14:45 | so | 1523-SW7 | BMI05071561-03A |
| | TPH/E_C 8260/MTBE_ C | | PNA/PAH | | 0 5 | Qı | 07/12/05 11:05 | SO | 1523-SW-10 DUP | BMI05071561-02A |
| | TPH/E_C 8260/MTBE_ C | | PNA/PAH | | 0 5 | ڻ. | 07/12/05 11:05 | SO | 1523-SW3-10 | BMI05071561-01A |
| Sample Remarks | | | * | T PWS# | ЈВ ТАТ | ORG SUB | Matrix Date | Matri | Sample ID | Sample ID |
| | voc_s | TPH/E_S | BNA_S | | ttles | No. of Bottles | Collection | | Client | Alpha (|
| Requested Tests | Rec | | | | | | | | | |

Comments:

Security seals intact, frozen ice. Level IV QC required. Samples should be used as the control spike sample if possible. If Jet Fuel is seen, report as Diesel and Footnote report. Report J-values for Benzene down to 0.25 ug/L. Various samples rec'd wi: th sample label date and I'd differences. Sample 12 rec'd broken, large amount salvaged lab used for analysis. Encore samples 01.03.08.09 frozen on 7/12/05 through 1000 7/14/05....SOME ENCORES HAVE EXPIRED. Amended 07/19/05: See W.O. Info.

Received by:

Print Name Print Name Print Name Print Name

Alpha Analytical, Inc.

7/19/05 1D:52

Matrix Type: AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information:

505 King Avenue

Columbus, OH 43201

Battelle Memorial Institute

505 King Avenue

CHAIN-OF-CUSTODY RECORD

Alpha Analytical, Inc.

255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778 TEL: (775) 355-1044 FAX: (775) 355-0406

Bob Janosy

FAX: TEL: (614) 424-3667 (614) 424-7160 ×

EMail janosyr@battelle.org

AMENDED 2012

WorkOrder: BMI05071561

Report Due By: 5:00 PM On: 22-Jul-05

EDD Required: Yes

Sampled by: Scott Lowe

CC Report: QC Level: DS3 Report Attention: Columbus, OH 43201 Bob Janosy = DOD QC Required : Final Rpt, MBLK, LCS, MS/MSD With Surrogates Job : T0102 190907 Client's COC #: 6904/6905 Cooler Temp: 4°C Date Printed: 19-Jul-05

| Alpha | Client | Collection | on No. of Bottles | ottles | | BNA_S | TPH/E_S | Voc_s | | | |
|-----------------|-----------------------------|----------------------|-------------------|---------|--------|-------|---------|-------|---|------------------------------|---------------------------------------------------------------------------|
| Sample ID | Sample ID | Matrix Date | ORG | SUB TAT | T PWS# | | | | | Sar | Sample Remarks |
| BMI05071561-10. | BMI05071561-10A 1523-SW1-10 | SO 07/12/05 10:10 | 1 | 0 5 | | | TPH/E_C | | | | |
| BMI05071561-11A | A 1523-SW2-10 | SO 07/12/05 10:15 | 1 | 0 5 | | | TPH/E_C | | - | | |
| BMI05071561-12A | A 1523-SW9 | SO 07/13/05 12:07 | 75 | 0 5 | | | TPH/E_C | | | Broker footage 10', no | Broken jar, sample label footage noted, 1523-SW9-10', no footage on chain |
| BMI05071561-13A | A 1523-SW10 | SO 07/13/05 15:57 | 75 | 0 5 | | | TPH/E_C | | | sample I 1523-SV | sample label footage noted, 1523-SW10-10', no footage on chain |
| BMI05071561-14A | A 1523-BS2-12 | SO 07/12/05 11:00 | 1 | 0 5 | | | TPH/E_C | | | | |
| BMI05071561-15A | A 1523-BS3-13 | SO 07/12/05 11:50 | 1 | 0 5 | | | TPH/E_C | | | | |
| BMI05071561-16A | A 1523-BS5 | SO 07/12/05 13:30 | 1 | O 5 | | | TPH/E_C | | | | |
| BMI05071561-17A | A 1523-BS7 | SO 07/13/05 12:10 | 1 | 0 5 | | | TPH/E_C | | | sample l 1523-BS | sample label footage noted, 1523-BS7-13', no footage on chain |

Benzene down to 0.25 ug/L. Various samples rec'd wi: th sample label date and I'd differences. Sample 12 rec'd broken, large amount salvaged lab used for analysis. Encore samples 01.03.08.09 frozen on 7/12/05 through 1000 7/14/05.....SOME ENCORES HAVE EXPIRED. Amended 07/19/05: See W.O. Info.

| | Signature | Print Name | Company |
|--------------|-----------|------------|------------------------|
| Received by: | | | Alpha Analytical, Inc. |

Date/Time

Matrix Type: AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report. NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

| | | | ; ; ; |
|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| | Alpha Analytical, Inc. 255 Glendale Avenue, Suite 21 | al, Inc. AZ CA NV WA Page OTHER Page OT | WA Page # of |
| Address 000 F/NO 710. City, State, Zip (10/10/16/15) OH 43201 Phone Number (2/14/14/24/11/40) Fax | Sparks, Nevada 89431-5778 Phone (775) 355-1044 Fax (775) 355-0406 | Analyses Required | / 6904 |
| Client Name BATEIIE | 6010L# 14060± 100103 | 102 / / / / / | / Required QC Level? |
| Address SOSKING A VE. | Ē | | / II II IV |
| City, State, Zip / MBUS, OH 43201 | | H-1/05/14 | EDD / EDF? YES NO |
| Time Date Matrix* Office Use Sampled by SOTI COXE | Report Attention | Total and type of P | Global ID # |
| Lab ID | | | REMARKS |
| 1105 7-12 50 | 1523-5w3-10 | 5.94 XXX | EN CORE SAMPLES |
| 11 11 | 1523-5W3-10 DUP | = × × × | -5w3-10;-5w-7; |
| 19457-12 03 | 1523-5w7 | グダメメメ | -856;-B58 |
| 1265 7-13 04 | 1523-5228-10 | 4% X X | FROZEN ON 7-12-05 |
| 1700 7-13 05 | 1523-5W11-10 | 4-07 XX | |
| 10037-12 00 | 1523-BS1-12 | 4-07 XX Notable or exce | |
| 12457-12 07 | 1523-B54-13 | 4-83 XX | |
| 1500 7-12 08 | 1523-BSG | , | |
| 1555 7-12 | 1523-B58 | SOF XXX STREET SOFT | 16 10 10 10 10 10 10 10 10 10 10 10 10 10 |
| 10/0 7-12 | 1523-5121-10 | /3 X | |
| 11 21-65/0/ | 1523-5W2-10 | | |
| 12077-13 | 1523-5W9 | 1-5 X Burken Joh | west to 1823 - Soul-10 |
| 15577-13 4 13 | 1523-5610 | 1-5 X | no fr on chain |
| ADDITIONAL INSTRUCTIONS: | | | |
| Signatur | Print Name | Company | Date Time |
| Relinquished by | SCOTTLOWE | BATTELIE | 7-14-05 1115 |
| Received by Relinquished by | S. SIFHENTES | ALPHA | 7-15-05 12:31 |
| Received by | | | |
| Relinquished by | | | |
| Received by | | | |

of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis

**: L-Liter

V-Voa

S-Soil Jar

O-Orbo

T-Tedlar

B-Brass

P-Plastic

OT-Other

*Key: AQ - Aqueous

SO - Soil

WA - Waste

OT - Other

| · · | 22 | Alpha Analytical, Inc. 255 Glendale Avenue, Suite 21 | Samples Collected From Which State? AZ CA X NV WA Pace ID OR OTHER | hich State? WA |
|------------------------------------------------------------------------------------------|------------------------------------|-------------------------------------------------------------------------|---------------------------------------------------------------------|--------------------|
| Address SOS KING AVE City, State, Zip Columbis, OH 43201 Phone Number(214/424: 7-160 Fax | TI P S | Sparks, Nevada 89431-5778 Phone (775) 355-1044 Fax (775) 355-0406 | Analyses | 6905 |
| Client Name ATTEILE | +0909/ _{*.0.4} | Job# | | Required QC Level? |
| Address 505 KING AVE. | EMAIL Address THOSYLOBATIE!!E-OUC | | | / I II III IV |
| \mathcal{O} | | | | EDD / EDF? YES NO |
| Time Date Matrix* Office Use Sampled by Soft Lowe | | | | Global ID # |
| Below Lab ID | Sample Description | ` | | REMARKS |
| 1100 7-12 50 14 | 1523-B52-12 | 2 1-5 X | | |
| 11.50 7-12 15 | <u></u> | - /-ン × | | |
| 13307-12 / | 13 | 7.5 X | | _ |
| 1210 7-13 4 17 | 1523-1 | 1/3 X | | to father or chain |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| ADDITIONAL INSTRUCTIONS: | | | | |
| | | | | |
| Relinquished by Signature | トアング | RATEIR | Company | Date Time |
| Received by 11-0 | | | | + |
| Relinquished by | S-3 IFUENTES | ACPHA | | 7-15-15 12:31 |
| Received by | | | | |
| Relinquished by | | | | |
| Received by | | | | |
| *Key: AQ - Aqueous SO - Soil WA - Waste | aste OT - Other | **: L-Liter V-Voa S-Soil Jar | O-Orbo T-Tedlar B-Brass | P-Plastic OT-Other |

of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute 505 King Avenue Columbus, OH 43201 Attn: Bob Janosy Phone: (614) 424-7160 Fax: (614) 424-3667

Date Received: 07/15/05

Job#: T0102

Total Petroleum Hydrocarbons - Extractable (TPH-E) EPA Method SW8015B/DHS LUFT Manual

| | | Parameter | Concentration | on | Reporting Limit | Date Sampled | Date Analyzed |
|-------------|-----------------|----------------|---------------|----|--------------------|-----------------|------------------|
| Client ID : | 1523-SW3-10 | TPH-E (Diesel) | 2,300 | | 5.0 mg/Kg | 07/12/05 | 07/19/05 |
| Lab ID : | BMI05071561-01A | TPH-E (Oil) | 530 | RG | 10 mg/Kg | 07/12/05 | 07/19/05 |
| | | Surr: Nonane | 61 | | %REC | 07/12/05 | 07/19/05 |
| Client ID : | 1523-SW3-10 DUP | TPH-E (Diesel) | 2,100 | | 5.0 mg/Kg | 07/12/05 | 07/19/05 |
| ab ID : | BMI05071561-02A | TPH-E (Oil) | 550 | RG | 10 mg/Kg | 07/12/05 | 07/19/05 |
| | | Surr: Nonane | 97 | | %REC | 07/12/05 | 07/19/05 |
| Client ID : | 1523-SW7 | TPH-E (Diesel) | 1,400 | | 5.0 mg/Kg | 07/12/05 | 07/19/05 |
| Lab ID : | BMI05071561-03A | TPH-E (Oil) | 390 | RG | 10 mg/Kg | 07/12/05 | 07/19/05 |
| | | Surr: Nonane | 104 | | %REC | 07/12/05 | 07/19/05 |
| Client ID : | 1523-SW8-10 | TPH-E (Diesel) | ND | | 5.0 mg/Kg | 07/13/05 | 07/19/05 |
| Lab ID : | BMI05071561-04A | TPH-E (Oil) | ND | | 10 mg/Kg | 07/13/05 | 07/19/05 |
| | | Surr: Nonane | 97 | | %REC | 07/13/05 | 07/19/05 |
| Client ID : | 1523-SW11-10 | TPH-E (Diesel) | 2,300 | | 5.0 mg/Kg | 07/13/05 | 07/19/05 |
| ab ID : | BMI05071561-05A | TPH-E (Oil) | 600 | RG | 10 mg/Kg | 07/13/05 | 07/19/05 |
| | | Surr: Nonane | 50 | | %REC | 07/13/05 | 07/19/05 |
| Client ID : | 1523-BS1-12 | TPH-E (Diesel) | 2,000 | | 5.0 mg/Kg | 07/12/05 | 07/19/05 |
| Lab ID : | BMI05071561-06A | TPH-E (Oil) | 520 | RG | 10 mg/Kg | 07/12/05 | 07/19/05 |
| | | Surr: Nonane | 50 | | %REC | 07/12/05 | 07/19/05 |
| Client ID : | 1523-BS4-13 | TPH-E (Diesel) | 2,500 | | 5.0 mg/Kg | 07/12/05 | 07/19/05 |
| Lab ID : | BMI05071561-07A | TPH-E (Oil) | 600 | RG | 10 mg/Kg | 07/12/05 | 07/19/05 |
| | | Surr: Nonane | 53 | | %REC | 07/12/05 | 07/19/05 |
| Client ID : | 1523-BS6 | TPH-E (Diesel) | 1,600 | | 5.0 mg/Kg | 07/12/05 | 07/19/05 |
| Lab ID : | BMI05071561-08A | TPH-E (Oil) | 440 | RG | 10 mg/Kg | 07/12/05 | 07/19/05 |
| | | Surr: Nonane | 100 | | %REC | 07/12/05 | 07/19/05 |
| Client ID : | 1523-BS8 | TPH-E (Diesel) | 2,800 | | 5.0 mg/Kg | 07/12/05 | 07/19/05 |
| Lab ID : | BMI05071561-09A | TPH-E (Oil) | 660 | RG | 10 mg/Kg | | 07/19/05 |
| | | Surr: Nonane | 115 | | %REC | 07/12/05 | 07/19/05 |
| Client ID : | 1523-SW1-10 | TPH-E (Diesel) | 2,100 | | 5.0 mg/Kg | | 07/19/05 |
| Lab ID : | BMI05071561-10A | TPH-E (Oil) | 460 | RG | 10 mg/Kg | 07/12/05 | 07/19/05 |
| | | Surr: Nonane | 108 | | %REC | 07/12/05 | 07/19/05 |



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

| Client ID: | 1523-SW2-10 | TPH-E (Diesel) | 1,200 | | 5.0 mg/Kg | 07/12/05 | 07/20/05 |
|-------------|-------------------|----------------|-------|----|-----------|----------|----------|
| Lab ID : | BMI05071561-11A | TPH-E (Oil) | 300 | RG | 10 mg/Kg | 07/12/05 | 07/20/05 |
| | | Surr: Nonane | 91 | | %REC | 07/12/05 | 07/20/05 |
| Client ID : | 1523-SW9 | TPH-E (Diesel) | 7.8 | | 5.0 mg/Kg | 07/13/05 | 07/20/05 |
| Lab ID: | BMI05071561-12A | TPH-E (Oil) | ND | | 10 mg/Kg | 07/13/05 | 07/20/05 |
| Lab ID . | Bivil030713011211 | ` ' | | | | | |
| | | Surr: Nonane | 96 | | %REC | 07/13/05 | 07/20/05 |
| Client ID: | 1523-SW10 | TPH-E (Diesel) | ND | | 5.0 mg/Kg | 07/13/05 | 07/20/05 |
| Lab ID: | BMI05071561-13A | TPH-E (Oil) | ND | | 10 mg/Kg | 07/13/05 | 07/20/05 |
| | | Surr: Nonane | 99 | | %REC | 07/13/05 | 07/20/05 |
| or ID | 4500 DS0 10 | TDILE (D:1) | 310 | | 5.0 mg/Kg | 07/12/05 | 07/20/05 |
| Client ID: | 1523-BS2-12 | TPH-E (Diesel) | | | | | |
| Lab ID: | BMI05071561-14A | TPH-E (Oil) | 83 | RG | 10 mg/Kg | 07/12/05 | 07/20/05 |
| | | Surr: Nonane | 98 | | %REC | 07/12/05 | 07/20/05 |
| Client ID: | 1523-BS3-13 | TPH-E (Diesel) | 330 | | 5.0 mg/Kg | 07/12/05 | 07/20/05 |
| Lab ID : | BMI05071561-15A | TPH-E (Oil) | 81 | RG | 10 mg/Kg | 07/12/05 | 07/20/05 |
| | | Surr: Nonane | 56 | | %REC | 07/12/05 | 07/20/05 |
| | | | | | | | |
| Client ID: | 1523-BS5 | TPH-E (Diesel) | 610 | | 5.0 mg/Kg | 07/12/05 | 07/20/05 |
| Lab ID : | BMI05071561-16A | TPH-E (Oil) | 150 | RG | 10 mg/Kg | 07/12/05 | 07/20/05 |
| | | Surr: Nonane | 97 | | %REC | 07/12/05 | 07/20/05 |
| Client ID : | 1523-BS7 | TPH-E (Diesel) | 2,600 | | 5.0 mg/Kg | 07/13/05 | 07/20/05 |
| Lab ID: | BMI05071561-17A | TPH-E (Oil) | 500 | RG | 10 mg/Kg | 07/13/05 | 07/20/05 |
| | | Surr: Nonane | 128 | | %REC | 07/13/05 | 07/20/05 |
| | | | | | | | |

G = Compounds outside the range of diesel have varying amounts of recovery.

Roger Scholl Kandy Saulner Walter Hinchman, Quality Assurance Officer

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • watter Hinchman, Quanty Assurance Office Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

R = Reported oil concentration may include some undifferentiated additional lighter-end hydrocarbons.

ND = Not Detected



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: T0102

Alpha Analytical Number: BMI05071561-01A

Client I.D. Number: 1523-SW3-10

Attn: Bob Janosy Phone: (614) 424-7160

Fax: (614) 424-3667

Sampled: 07/12/05

Received: 07/15/05 Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

| | | Reporting | | | | | | | |
|----|--------------------------------|---------------|-------|-------|----|------------------------------------|---------------|-------|-------|
| | Compound | Concentration | Limit | | | Compound | Concentration | Limit | |
| 1 | Dichlorodifluoromethane | ND | 100 | μg/Kg | 36 | m,p-Xylene | ND | 50 | μg/Kg |
| 2 | Chloromethane | ND | 200 | μg/Kg | 37 | Bromoform | ND | 100 | μg/Kg |
| 3 | Vinyl chloride | ND | 100 | μg/Kg | 38 | Styrene | ND | 100 | μg/Kg |
| 4 | Chloroethane | ND | 100 | μg/Kg | 39 | o-Xylene | 51 | 50 | μg/Kg |
| 5 | Bromomethane | ND | 400 | μg/Kg | 40 | 1,1,2,2-Tetrachloroethane | ND | 100 | μg/Kg |
| 6 | Trichlorofluoromethane | ND | 100 | μg/Kg | 41 | 1,2,3-Trichloropropane | ND | 400 | μg/Kg |
| 7 | 1,1-Dichloroethene | ND | 100 | μg/Kg | 42 | Isopropylbenzene | ND | 100 | μg/Kg |
| 8 | Dichloromethane | ND | 400 | μg/Kg | 43 | Bromobenzene | ND | 100 | μg/Kg |
| 9 | trans-1,2-Dichloroethene | ND | 100 | μg/Kg | 44 | n-Propylbenzene | 130 | 100 | μg/Kg |
| 10 | Methyl tert-butyl ether (MTBE) | ND | 50 | μg/Kg | 45 | 4-Chlorotoluene | ND | 100 | μg/Kg |
| 11 | 1,1-Dichloroethane | ND | 100 | μg/Kg | 46 | 2-Chlorotoluene | ND | 100 | μg/Kg |
| 12 | cis-1,2-Dichloroethene | ND | 100 | μg/Kg | 47 | 1,3,5-Trimethylbenzene | ND | 100 | μg/Kg |
| 13 | Bromochloromethane | ND | 100 | μg/Kg | 48 | tert-Butylbenzene | ND | 100 | μg/Kg |
| 14 | Chloroform | ND | 100 | μg/Kg | 49 | 1,2,4-Trimethylbenzene | 380 | 100 | μg/Kg |
| 15 | 2,2-Dichloropropane | ND | 100 | μg/Kg | 50 | sec-Butylbenzene | 230 | 100 | μg/Kg |
| 16 | 1,2-Dichloroethane | ND | 100 | μg/Kg | 51 | 1,3-Dichlorobenzene | ND | 100 | µg/Kg |
| 17 | 1,1,1-Trichloroethane | ND | 100 | μg/Kg | 52 | 1,4-Dichlorobenzene | ND | 100 | μg/Kg |
| 18 | 1,1-Dichloropropene | ND | 100 | μg/Kg | 53 | 4-Isopropyltoluene | 270 | 100 | μg/Kg |
| 19 | Carbon tetrachloride | ND | 100 | μg/Kg | 54 | 1,2-Dichlorobenzene | ND | 100 | μg/Kg |
| 20 | Benzene | ND | 50 | μg/Kg | 55 | n-Butylbenzene | 300 | 100 | µg/Kg |
| 21 | Dibromomethane | ND | 100 | μg/Kg | 56 | 1,2-Dibromo-3-chloropropane (DBCP) | | 600 | μg/Kg |
| 22 | 1,2-Dichloropropane | ND | 100 | μg/Kg | 57 | 1,2,4-Trichlorobenzene | ND | 400 | μg/Kg |
| 23 | Trichloroethene | ND | 100 | μg/Kg | 58 | Naphthalene | ND | 1,300 | μg/Kg |
| 24 | Bromodichloromethane | ND | 100 | μg/Kg | 59 | Hexachlorobutadiene | ND | 400 | μg/Kg |
| 25 | cis-1,3-Dichloropropene | ND | 100 | μg/Kg | 60 | 1,2,3-Trichlorobenzene | ND | 400 | μg/Kg |
| 26 | trans-1,3-Dichloropropene | ND | 100 | μg/Kg | 61 | Surr: 1,2-Dichloroethane-d4 | 93 | | %REC |
| 27 | 1,1,2-Trichloroethane | ND | 100 | μg/Kg | 62 | Surr: Toluene-d8 | 98 | | %REC |
| 28 | Toluene | ND | 50 | μg/Kg | 63 | Surr: 4-Bromofluorobenzene | 96 | | %REC |
| 29 | 1,3-Dichloropropane | ND | 100 | μg/Kg | | | | | |
| 30 | Dibromochloromethane | ND | 100 | μg/Kg | | | | | |

Reporting Limits were increased due to high concentrations of non-target analytes.

ND

ND

ND

EnCore sample was not received within the 48-hour extraction holding time. Sample was extracted 3 days and 2 hours, outside of holding time, and analyzed per client request.

ND = Not Detected

31 1,2-Dibromoethane (EDB)

1,1,1,2-Tetrachloroethane

Tetrachloroethene

Chlorobenzene

35 Ethylbenzene

33

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

100

100

μg/Kg

μg/Kg

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Report Date



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: T0102

Alpha Analytical Number: BMI05071561-02A Client I.D. Number: 1523-SW3-10 DUP

Attn: Bob Janosy Phone: (614) 424-7160

Fax: (614) 424-3667

Sampled: 07/12/05 Received: 07/15/05 Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

| | | | Reportir | ng | | | | |
|----|--------------------------------|---------------|----------|---------|------------------------------------|---------------|-------|-------|
| | Compound | Concentration | Limit | | Compound | Concentration | Limit | |
| 1 | Dichlorodifluoromethane | ND | 100 µg | g/Kg 36 | m,p-Xylene | ND | 50 | μg/Kg |
| 2 | Chloromethane | ND | | g/Kg 37 | Bromoform | ND | 100 | μg/Kg |
| 3 | Vinyl chloride | ND | 100 μg | g/Kg 38 | Styrene | ND | 100 | μg/Kg |
| 4 | Chloroethane | ND | 100 µg | g/Kg 39 | o-Xylene | ND | 50 | μg/Kg |
| 5 | Bromomethane | ND | 400 µg | g/Kg 40 | 1,1,2,2-Tetrachloroethane | ND | 100 | μg/Kg |
| 6 | Trichlorofluoromethane | ND | 100 µg | g/Kg 41 | 1,2,3-Trichloropropane | ND | 400 | μg/Kg |
| 7 | 1.1-Dichloroethene | ND | 100 µg | g/Kg 42 | Isopropylbenzene | ND | 100 | μg/Kg |
| 8 | Dichloromethane | ND | 400 µg | g/Kg 43 | Bromobenzene | ND | 100 | μg/Kg |
| 9 | trans-1,2-Dichloroethene | ND | 100 µg | g/Kg 44 | n-Propylbenzene | ND | 100 | μg/Kg |
| 10 | Methyl tert-butyl ether (MTBE) | ND | 50 μg | g/Kg 45 | 4-Chlorotoluene | ND | 100 | μg/Kg |
| 11 | 1,1-Dichloroethane | ND | 100 µg | g/Kg 46 | 2-Chlorotoluene | ND | 100 | μg/Kg |
| 12 | cis-1,2-Dichloroethene | ND | 100 µg | g/Kg 47 | 1,3,5-Trimethylbenzene | ND | 100 | μg/Kg |
| 13 | Bromochloromethane | ND | 100 µg | g/Kg 48 | tert-Butylbenzene | ND | 100 | μg/Kg |
| 14 | Chloroform | ND | 100 µg | g/Kg 49 | 1,2,4-Trimethylbenzene | 120 | 100 | μg/Kg |
| 15 | 2,2-Dichloropropane | ND | 100 µg | g/Kg 50 | sec-Butylbenzene | 100 | 100 | μg/Kg |
| 16 | 1,2-Dichloroethane | ND | 100 µg | g/Kg 51 | 1,3-Dichlorobenzene | ND | 100 | μg/Kg |
| 17 | 1,1,1-Trichloroethane | ND | 100 µg | g/Kg 52 | 1,4-Dichlorobenzene | ND | 100 | μg/Kg |
| 18 | 1,1-Dichloropropene | ND | 100 µg | g/Kg 53 | 4-Isopropyltoluene | 120 | 100 | μg/Kg |
| 19 | Carbon tetrachloride | ND | 100 µg | g/Kg 54 | 1,2-Dichlorobenzene | ND | 100 | μg/Kg |
| 20 | Benzene | ND | 50 μg | g/Kg 55 | n-Butylbenzene | 160 | 100 | μg/Kg |
| 21 | Dibromomethane | ND | 100 µg | g/Kg 56 | 1,2-Dibromo-3-chloropropane (DBCP) | ND | 600 | μg/Kg |
| 22 | 1,2-Dichloropropane | ND | 100 µg | g/Kg 57 | 1,2,4-Trichlorobenzene | ND | 400 | μg/Kg |
| 23 | Trichloroethene | ND | 100 µg | g/Kg 58 | Naphthalene | ND | 900 | μg/Kg |
| 24 | Bromodichloromethane | ND | 100 µg | g/Kg 59 | Hexachlorobutadiene | ND | 400 | μg/Kg |
| 25 | cis-1,3-Dichloropropene | ND | 100 µg | g/Kg 60 | 1,2,3-Trichlorobenzene | ND | 400 | μg/Kg |
| 26 | trans-1,3-Dichloropropene | ND | 100 µg | g/Kg 61 | Surr: 1,2-Dichloroethane-d4 | 94 | | %REC |
| 27 | 1,1,2-Trichloroethane | ND | | g/Kg 62 | Surr: Toluene-d8 | 95 | | %REC |
| 28 | Toluene | ND | | g/Kg 63 | Surr: 4-Bromofluorobenzene | 95 | | %REC |
| 29 | 1,3-Dichloropropane | ND | | g/Kg | | | | |
| 30 | Dibromochloromethane | ND | | g/Kg | | | | |
| | | 115 | | /1/ | | | | |

Reporting Limits were increased due to high concentrations of non-target analytes.

ND

ND

ND

ND

EnCore sample was not received within the 48-hour extraction holding time. Sample was extracted 3 days and 2 hours, outside of holding time, and analyzed per client request.

ND = Not Detected

1,2-Dibromoethane (EDB)

1,1,1,2-Tetrachloroethane

Tetrachloroethene

Chlorobenzene Ethylbenzene

31

32

33

34

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

100

100

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

7/21/05

Report Date
Page 1 of 1



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: T0102

Alpha Analytical Number: BMI05071561-03A

Client I.D. Number: 1523-SW7

Bob Janosy Attn:

Phone: (614) 424-7160 Fax:

(614) 424-3667

Sampled: 07/12/05

Received: 07/15/05 Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

| | Reporting | | | | | | | Reporting | | |
|----|--------------------------------|---------------|-------|-------|----|------------------------------------|---------------|-----------|-------|--|
| | Compound | Concentration | Limit | | | Compound | Concentration | Limit | | |
| 1 | Dichlorodifluoromethane | ND | 100 | μg/Kg | 36 | m,p-Xylene | ND | 50 | μg/Kg | |
| 2 | Chloromethane | ND | 200 | μg/Kg | 37 | Bromoform | ND | 100 | μg/Kg | |
| 3 | Vinyl chloride | ND | 100 | μg/Kg | 38 | Styrene | ND | 100 | μg/Kg | |
| 4 | Chloroethane | ND | 100 | μg/Kg | 39 | o-Xylene | ND | 50 | μg/Kg | |
| 5 | Bromomethane | ND | 400 | μg/Kg | 40 | 1,1,2,2-Tetrachloroethane | ND | 100 | μg/Kg | |
| 6 | Trichlorofluoromethane | ND | 100 | μg/Kg | 41 | 1,2,3-Trichloropropane | ND | 400 | μg/Kg | |
| 7 | 1.1-Dichloroethene | ND | 100 | μg/Kg | 42 | Isopropylbenzene | ND | 100 | μg/Kg | |
| 8 | Dichloromethane | ND | 400 | μg/Kg | 43 | Bromobenzene | ND | 100 | μg/Kg | |
| 9 | trans-1,2-Dichloroethene | ND | 100 | μg/Kg | 44 | n-Propylbenzene | ND | 100 | μg/Kg | |
| 10 | Methyl tert-butyl ether (MTBE) | ND | 50 | μg/Kg | 45 | 4-Chlorotoluene | ND | 100 | μg/Kg | |
| 11 | 1.1-Dichloroethane | ND | 100 | μg/Kg | 46 | 2-Chlorotoluene | ND | 100 | μg/Kg | |
| 12 | cis-1,2-Dichloroethene | ND | 100 | μg/Kg | 47 | 1,3,5-Trimethylbenzene | ND | 100 | μg/Kg | |
| 13 | Bromochloromethane | ND | 100 | μg/Kg | 48 | tert-Butylbenzene | ND | 100 | μg/Kg | |
| 14 | Chloroform | ND | 100 | μg/Kg | 49 | 1,2,4-Trimethylbenzene | ND | 100 | μg/Kg | |
| 15 | 2,2-Dichloropropane | ND | 100 | μg/Kg | 50 | sec-Butylbenzene | ND | 100 | μg/Kg | |
| 16 | 1,2-Dichloroethane | ND | 100 | μg/Kg | 51 | 1,3-Dichlorobenzene | ND | 100 | μg/Kg | |
| 17 | 1,1,1-Trichloroethane | ND | 100 | μg/Kg | 52 | 1,4-Dichlorobenzene | ND | 100 | μg/Kg | |
| 18 | 1,1-Dichloropropene | ND | 100 | μg/Kg | 53 | 4-Isopropyltoluene | ND | 100 | μg/Kg | |
| 19 | Carbon tetrachloride | ND | 100 | μg/Kg | 54 | 1,2-Dichlorobenzene | ND | 100 | μg/Kg | |
| 20 | Benzene | ND | 50 | μg/Kg | 55 | n-Butylbenzene | 110 | 100 | μg/Kg | |
| 21 | Dibromomethane | ND | 100 | μg/Kg | 56 | 1,2-Dibromo-3-chloropropane (DBCP) | | 600 | μg/Kg | |
| 22 | 1,2-Dichloropropane | ND | 100 | μg/Kg | 57 | 1,2,4-Trichlorobenzene | ND | 400 | μg/Kg | |
| 23 | Trichloroethene | ND | 100 | μg/Kg | 58 | Naphthalene | ND | 700 | μg/Kg | |
| 24 | Bromodichloromethane | ND | 100 | μg/Kg | 59 | Hexachlorobutadiene | ND | 400 | μg/Kg | |
| 25 | cis-1,3-Dichloropropene | ND | 100 | μg/Kg | 60 | 1,2,3-Trichlorobenzene | ND | 400 | μg/Kg | |
| 26 | trans-1,3-Dichloropropene | ND | 100 | μg/Kg | 61 | Surr: 1,2-Dichloroethane-d4 | 93 | | %REC | |
| 27 | 1,1,2-Trichloroethane | ND | 100 | μg/Kg | 62 | Surr: Toluene-d8 | 95 | | %REC | |
| 28 | Toluene | ND | 50 | μg/Kg | 63 | Surr: 4-Bromofluorobenzene | 98 | | %REC | |
| 29 | 1,3-Dichloropropane | ND | 100 | μg/Kg | | | | | | |
| 30 | Dibromochloromethane | ND | | μg/Kg | | | | | | |
| | | | 400 | | | | | | | |

Reporting Limits were increased due to high concentrations of non-target analytes.

EnCore sample was not received within the 48-hour extraction holding time. Sample was extracted 3 days, outside of holding time, and analyzed per client request.

ND = Not Detected

1,2-Dibromoethane (EDB)

1,1,1,2-Tetrachloroethane

Tetrachloroethene

Chlorobenzene

Ethylbenzene

31

34

Roger Scholl

ND

ND

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

100

100

μg/Kg

μg/Kg

Report Date



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute 505 King Avenue

Columbus, OH 43201 Job#: T0102

Job#: T0102 Alpha Analytical Number: BMI05071561-04A

Client I.D. Number: 1523-SW8-10

Attn: Bob Janosy Phone: (614) 424-7160

Fax: (614) 424-3667

Sampled: 07/13/05 Received: 07/15/05

Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

| | | | Reporti | ng | | | | Reportir | ng |
|----|--------------------------------|---------------|---------|-------|----|------------------------------------|---------------|----------|-------|
| | Compound | Concentration | Limit | | | Compound | Concentration | Limit | |
| 1 | Dichlorodifluoromethane | ND | 20 | μg/Kg | 36 | m,p-Xylene | ND | 5.0 | μg/Kg |
| 2 | Chloromethane | ND | 40 | μg/Kg | 37 | Bromoform | ND | 20 | µg/Kg |
| 3 | Vinyl chloride | ND | 20 | μg/Kg | 38 | Styrene | ND | 20 | μg/Kg |
| 4 | Chloroethane | ND | 20 | μg/Kg | 39 | o-Xylene | ND | 5.0 | μg/Kg |
| 5 | Bromomethane | ND | 40 | μg/Kg | 40 | 1,1,2,2-Tetrachloroethane | ND | 20 | μg/Kg |
| 6 | Trichlorofluoromethane | ND | 20 | μg/Kg | 41 | 1,2,3-Trichloropropane | ND | 40 | μg/Kg |
| 7 | 1,1-Dichloroethene | ND | 20 | μg/Kg | 42 | lsopropylbenzene | ND | 20 | μg/Kg |
| 8 | Dichloromethane | ND | 40 | μg/Kg | 43 | Bromobenzene | ND | 20 | µg/Kg |
| 9 | trans-1,2-Dichloroethene | ND | 20 | μg/Kg | 44 | n-Propylbenzene | ND | 20 | μg/Kg |
| 10 | Methyl tert-butyl ether (MTBE) | ND | 5.0 | μg/Kg | 45 | 4-Chlorotoluene | ND | 20 | μg/Kg |
| 11 | 1,1-Dichloroethane | ND | 20 | μg/Kg | 46 | 2-Chlorotoluene | ND | 20 | μg/Kg |
| 12 | cis-1,2-Dichloroethene | ND | 20 | μg/Kg | 47 | 1,3,5-Trimethylbenzene | ND | 20 | μg/Kg |
| 13 | Bromochloromethane | ND | 20 | μg/Kg | 48 | tert-Butylbenzene | ND | 20 | μg/Kg |
| 14 | Chloroform | ND | 20 | μg/Kg | 49 | 1,2,4-Trimethylbenzene | ND | 20 | µg/Kg |
| 15 | 2,2-Dichloropropane | ND | 20 | μg/Kg | 50 | sec-Butylbenzene | ND | 20 | µg/Kg |
| 16 | 1,2-Dichloroethane | ND | 20 | μg/Kg | 51 | 1,3-Dichlorobenzene | ND | 20 | µg/Kg |
| 17 | 1,1,1-Trichloroethane | ND | 20 | μg/Kg | 52 | 1,4-Dichlorobenzene | ND | 20 | µg/Kg |
| 18 | 1,1-Dichloropropene | ND | 20 | µg/Kg | 53 | 4-Isopropyltoluene | ND | 20 | µg/Kg |
| 19 | Carbon tetrachloride | ND | 20 | μg/Kg | 54 | 1,2-Dichlorobenzene | ND | 20 | μg/Kg |
| 20 | Benzene | ND | 5.0 | μg/Kg | 55 | n-Butylbenzene | ND | 20 | μg/Kg |
| 21 | Dibromomethane | ND | 20 | μg/Kg | 56 | 1,2-Dibromo-3-chloropropane (DBCP) | | 100 | μg/Kg |
| 22 | 1,2-Dichloropropane | ND | 20 | μg/Kg | 57 | 1,2,4-Trichlorobenzene | ND | 40 | μg/Kg |
| 23 | Trichloroethene | ND | 20 | μg/Kg | 58 | Naphthalene | ND | 40 | µg/Kg |
| 24 | Bromodichloromethane | ND | 20 | μg/Kg | 59 | Hexachlorobutadiene | ND | 40 | µg/Kg |
| 25 | cis-1,3-Dichloropropene | ND | 20 | μg/Kg | 60 | 1,2,3-Trichlorobenzene | ND | 40 | μg/Kg |
| 26 | trans-1,3-Dichloropropene | ND | 20 | μg/Kg | 61 | Surr: 1,2-Dichloroethane-d4 | 94 | | %REC |
| 27 | 1,1,2-Trichloroethane | ND | 20 | μg/Kg | 62 | Surr: Toluene-d8 | 96 | | %REC |
| 28 | Toluene | ND | 5.0 | μg/Kg | 63 | Surr: 4-Bromofluorobenzene | 91 | 1 | %REC |
| 29 | 1,3-Dichloropropane | ND | 20 | μg/Kg | | | | | |
| | | | | | | | | | |

EnCore sample was not received within the 48-hour extraction holding time. Sample was extracted 2 days and 2 hours, outside of holding time, and analyzed per client request.

ND = Not Detected

30 Dibromochloromethane31 1,2-Dibromoethane (EDB)

Tetrachloroethene

34 Chlorobenzene

35 Ethylbenzene

1,1,1,2-Tetrachloroethane

32

33

Roger Scholl Kandy Saulner Walter Hinchman, Quality Assurance Officer

20

20

μg/Kg

μg/Kg

ND ND

ND

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Report Date



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201 Job#: T0102

Alpha Analytical Number: BMI05071561-05A

Client I.D. Number: 1523-SW11-10

Attn: **Bob Janosy** (614) 424-7160 Phone:

(614) 424-3667 Fax:

Sampled: 07/13/05 Received: 07/15/05

Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

| | | | Reporting | g | | | | Reportii | ng |
|----|--------------------------------|---------------|-----------|-------|----|------------------------------------|---------------|----------|-------|
| | Compound | Concentration | Limit | | | Compound | Concentration | Limit | |
| 1 | Dichlorodifluoromethane | ND | 100 | μg/Kg | 36 | m,p-Xylene | ND | 50 | μg/Kg |
| 2 | Chloromethane | ND | 200 | μg/Kg | 37 | Bromoform | ND | 100 | μg/Kg |
| 3 | Vinyl chloride | ND | 100 | μg/Kg | 38 | Styrene | ND | 100 | µg/Kg |
| 4 | Chloroethane | ND | 100 | μg/Kg | 39 | o-Xylene | ND | 50 | μg/Kg |
| 5 | Bromomethane | ND | 400 | μg/Kg | 40 | 1,1,2,2-Tetrachloroethane | ND | 100 | µg/Kg |
| 6 | Trichlorofluoromethane | ND | 100 | μg/Kg | 41 | 1,2,3-Trichloropropane | ND | 400 | μg/Kg |
| 7 | 1.1-Dichloroethene | ND | 100 | μg/Kg | 42 | Isopropylbenzene | ND | 100 | μg/Kg |
| 8 | Dichloromethane | ND | 400 | μg/Kg | 43 | Bromobenzene | ND | 100 | μg/Kg |
| 9 | trans-1.2-Dichloroethene | ND | 100 | μg/Kg | 44 | n-Propylbenzene | ND | 100 | µg/Kg |
| 10 | Methyl tert-butyl ether (MTBE) | ND | 50 | μg/Kg | 45 | 4-Chlorotoluene | ND | 100 | μg/Kg |
| 11 | 1.1-Dichloroethane | ND | 100 | µg/Kg | 46 | 2-Chlorotoluene | ND | 100 | μg/Kg |
| 12 | cis-1.2-Dichloroethene | ND | 100 | μg/Kg | 47 | 1,3,5-Trimethylbenzene | ND | 100 | μg/Kg |
| 13 | Bromochloromethane | ND | 100 | μg/Kg | 48 | tert-Butylbenzene | ND | 100 | μg/Kg |
| 14 | Chloroform | ND | 100 | μg/Kg | 49 | 1,2,4-Trimethylbenzene | ND | 100 | μg/Kg |
| 15 | 2,2-Dichloropropane | ND | | μg/Kg | 50 | sec-Butylbenzene | 140 | 100 | μg/Kg |
| 16 | 1.2-Dichloroethane | ND | 100 | μg/Kg | 51 | 1,3-Dichlorobenzene | ND | 100 | µg/Kg |
| 17 | 1.1.1-Trichloroethane | ND | 100 | μg/Kg | 52 | 1,4-Dichlorobenzene | ND | 100 | μg/Kg |
| 18 | 1,1-Dichloropropene | ND | 100 | μg/Kg | 53 | 4-Isopropyltoluene | ND | 100 | μg/Kg |
| 19 | Carbon tetrachloride | ND | 100 | μg/Kg | 54 | 1,2-Dichlorobenzene | ND | 100 | µg/Kg |
| 20 | Benzene | ND | 50 | μg/Kg | 55 | n-Butylbenzene | 120 | 100 | μg/Kg |
| 21 | Dibromomethane | ND | 100 | μg/Kg | 56 | 1,2-Dibromo-3-chloropropane (DBCP) |) ND | 600 | μg/Kg |
| 22 | 1.2-Dichloropropane | ND | 100 | µg/Kg | 57 | 1,2,4-Trichlorobenzene | ND | 400 | μg/Kg |
| 23 | Trichloroethene | ND | | μg/Kg | 58 | Naphthalene | ND | 400 | μg/Kg |
| 24 | Bromodichloromethane | ND | i | μg/Kg | 59 | Hexachlorobutadiene | ND | 400 | μg/Kg |
| 25 | cis-1,3-Dichloropropene | ND | 100 | μg/Kg | 60 | 1,2,3-Trichlorobenzene | ND | 400 | μg/Kg |
| 26 | trans-1,3-Dichloropropene | ND | i | μg/Kg | 61 | Surr: 1,2-Dichloroethane-d4 | 92 | | %REC |
| 27 | 1.1.2-Trichloroethane | ND | | μg/Kg | 62 | Surr: Toluene-d8 | 95 | | %REC |
| 28 | Toluene | ND | | μg/Kg | 63 | Surr: 4-Bromofluorobenzene | 96 | | %REC |
| 29 | 1.3-Dichloropropane | ND | 1 | μg/Kg | | | | | |
| 30 | Dibromochloromethane | ND | i | μg/Kg | | | | | |
| | Diplomocnicidano | ND | 1 | ua/Ka | | | | | |

Reporting Limits were increased due to high concentrations of non-target analytes. EnCore sample was received and extracted within holding time.

ND = Not Detected

1,2-Dibromoethane (EDB)

1,1,1,2-Tetrachloroethane

Tetrachloroethene

34 Chlorobenzene

35 Ethylbenzene

32

33

Roger Scholl

ND

ND

ND

ND

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

μg/Kg

µg/Kg

μg/Kg

μg/Kg

400

100

100

Report Date



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

T0102 Job#:

Alpha Analytical Number: BMI05071561-06A

Client I.D. Number: 1523-BS1-12

Bob Janosy Attn:

Phone: (614) 424-7160 Fax:

(614) 424-3667

Sampled: 07/12/05 Received: 07/15/05

Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

| | | | Reporti | ng | | | | Reportir | ng |
|----|--------------------------------|---------------|---------|-------|----|------------------------------------|---------------|----------|-------|
| | Compound | Concentration | Limit | | | Compound | Concentration | Limit | |
| 1 | Dichlorodifluoromethane | ND | 100 | μg/Kg | 36 | m,p-Xylene | ND | 50 | μg/Kg |
| 2 | Chloromethane | ND | 200 | μg/Kg | 37 | Bromoform | ND | 100 | μg/Kg |
| 3 | Vinyl chloride | ND | 100 | μg/Kg | 38 | Styrene | ND | 100 | μg/Kg |
| 4 | Chloroethane | ND | 100 | μg/Kg | 39 | o-Xylene | ND | 50 | μg/Kg |
| 5 | Bromomethane | ND | 400 | μg/Kg | 40 | 1,1,2,2-Tetrachloroethane | ND | 100 | μg/Kg |
| 6 | Trichlorofluoromethane | ND | 100 | μg/Kg | 41 | 1,2,3-Trichloropropane | ND | 400 | μg/Kg |
| 7 | 1,1-Dichloroethene | ND | 100 | μg/Kg | 42 | Isopropylbenzene | ND | 100 | μg/Kg |
| 8 | Dichloromethane | ND | 400 | μg/Kg | 43 | Bromobenzene | ND | 100 | μg/Kg |
| 9 | trans-1,2-Dichloroethene | ND | 100 | μg/Kg | 44 | n-Propylbenzene | ND | 100 | μg/Kg |
| 10 | Methyl tert-butyl ether (MTBE) | ND | 50 | μg/Kg | 45 | 4-Chlorotoluene | ND | 100 | μg/Kg |
| 11 | 1,1-Dichloroethane | ND | 100 | μg/Kg | 46 | 2-Chlorotoluene | ND | 100 | μg/Kg |
| 12 | cis-1,2-Dichloroethene | ND | 100 | μg/Kg | 47 | 1,3,5-Trimethylbenzene | ND | 100 | μg/Kg |
| 13 | Bromochloromethane | ND | 100 | μg/Kg | 48 | tert-Butylbenzene | ND | 100 | μg/Kg |
| 14 | Chloroform | ND | 100 | μg/Kg | 49 | 1,2,4-Trimethylbenzene | 110 | 100 | μg/Kg |
| 15 | 2,2-Dichloropropane | ND | 100 | μg/Kg | 50 | sec-Butylbenzene | 160 | 100 | μg/Kg |
| 16 | 1,2-Dichloroethane | ND | 100 | μg/Kg | 51 | 1,3-Dichlorobenzene | ND | 100 | μg/Kg |
| 17 | 1,1,1-Trichloroethane | ND | 100 | μg/Kg | 52 | 1,4-Dichlorobenzene | ND | 100 | μg/Kg |
| 18 | 1,1-Dichloropropene | ND | 100 | μg/Kg | 53 | 4-Isopropyltoluene | 200 | 100 | μg/Kg |
| 19 | Carbon tetrachloride | ND | 100 | μg/Kg | 54 | 1,2-Dichlorobenzene | ND | 100 | μg/Kg |
| 20 | Benzene | ND | 50 | μg/Kg | 55 | n-Butylbenzene | 220 | 100 | μg/Kg |
| 21 | Dibromomethane | ND | 100 | μg/Kg | 56 | 1,2-Dibromo-3-chloropropane (DBCP) | 1 | 600 | μg/Kg |
| 22 | 1,2-Dichloropropane | ND | 100 | μg/Kg | 57 | 1,2,4-Trichlorobenzene | ND | 400 | μg/Kg |
| 23 | Trichloroethene | ND | 100 | μg/Kg | 58 | Naphthalene | ND | 1,100 | μg/Kg |
| 24 | Bromodichloromethane | ND | 100 | μg/Kg | 59 | Hexachlorobutadiene | ND | 400 | μg/Kg |
| 25 | cis-1,3-Dichloropropene | ND | 100 | μg/Kg | 60 | 1,2,3-Trichlorobenzene | ND | 400 | μg/Kg |
| 26 | trans-1,3-Dichloropropene | ND | 100 | μg/Kg | 61 | Surr: 1,2-Dichloroethane-d4 | 92 | | %REC |
| 27 | 1,1,2-Trichloroethane | ND | 100 | μg/Kg | 62 | Surr: Toluene-d8 | 96 | | %REC |
| 28 | Toluene | ND | 50 | μg/Kg | 63 | Surr: 4-Bromofluorobenzene | 96 | | %REC |
| 29 | 1,3-Dichloropropane | ND | 100 | μg/Kg | | | | | |
| 30 | Dibromochloromethane | ND | 100 | μg/Kg | | | | | |

Reporting Limits were increased due to high concentrations of non-target analytes.

EnCore sample was not received within the 48-hour extraction holding time. Sample was extracted 3 days and 4 hours, outside of holding time, and analyzed per client request.

400

100

100

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

μg/Kg

μg/Kg

μg/Kg

μg/Kg

ND = Not Detected

1,2-Dibromoethane (EDB)

1,1,1,2-Tetrachloroethane

Tetrachloroethene

Chlorobenzene

Ethylbenzene

31

32

34

35

ND

ND

ND

ND

7/21/05

Report Date



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

T0102 Job#:

Alpha Analytical Number: BMI05071561-07A

Client I.D. Number: 1523-BS4-13

Bob Janosy Attn:

(614) 424-7160 Phone: Fax:

(614) 424-3667

Sampled: 07/12/05 Received: 07/15/05

Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

| | | | Reporting | | | | | | |
|----|--------------------------------|---------------|-----------|----------------|----|------------------------------------|---------------|-------|-------|
| | Compound | Concentration | Limit | | | Compound | Concentration | Limit | |
| 1 | Dichlorodifluoromethane | ND | 100 | μg/Kg | 36 | m,p-Xylene | ND | 50 | μg/Kg |
| 2 | Chloromethane | ND | 200 | μg/Kg | 37 | Bromoform | ND | 100 | μg/Kg |
| 3 | Vinyl chloride | ND | 100 | μg/Kg | 38 | Styrene | ND | 100 | μg/Kg |
| 4 | Chloroethane | ND | 100 | μg/Kg | 39 | o-Xylene | ND | 50 | μg/Kg |
| 5 | Bromomethane | ND | 400 | μ g/K g | 40 | 1,1,2,2-Tetrachloroethane | ND | 100 | μg/Kg |
| 6 | Trichlorofluoromethane | ND | 100 | μg/Kg | 41 | 1,2,3-Trichloropropane | ND | 400 | μg/Kg |
| 7 | 1,1-Dichloroethene | ND | 100 | μg/Kg | 42 | Isopropylbenzene | ND | 100 | μg/Kg |
| 8 | Dichloromethane | ND | 400 | μg/Kg | 43 | Bromobenzene | ND | 100 | μg/Kg |
| 9 | trans-1,2-Dichloroethene | ND | 100 | μg/Kg | 44 | n-Propylbenzene | ND | 100 | μg/Kg |
| 10 | Methyl tert-butyl ether (MTBE) | ND | 50 | μg/Kg | 45 | 4-Chlorotoluene | ND | 100 | μg/Kg |
| 11 | 1,1-Dichloroethane | ND | 100 | μg/Kg | 46 | 2-Chlorotoluene | ND | 100 | μg/Kg |
| 12 | cis-1,2-Dichloroethene | ND | 100 | μg/Kg | 47 | 1,3,5-Trimethylbenzene | ND | 100 | μg/Kg |
| 13 | Bromochloromethane | ND | 100 | μg/Kg | 48 | tert-Butylbenzene | ND | 100 | μg/Kg |
| 14 | Chloroform | ND | 100 | μg/Kg | 49 | 1,2,4-Trimethylbenzene | ND | 100 | μg/Kg |
| 15 | 2,2-Dichloropropane | ND | 100 | μg/Kg | 50 | sec-Butylbenzene | ND | 100 | μg/Kg |
| 16 | 1,2-Dichloroethane | ND | 100 | μg/Kg | 51 | 1,3-Dichlorobenzene | ND | 100 | μg/Kg |
| 17 | 1,1,1-Trichloroethane | ND | 100 | μg/Kg | 52 | 1,4-Dichlorobenzene | ND | 100 | μg/Kg |
| 18 | 1,1-Dichloropropene | ND | 100 | μg/Kg | 53 | 4-Isopropyltoluene | 120 | 100 | μg/Kg |
| 19 | Carbon tetrachloride | ND | 100 | μg/Kg | 54 | 1,2-Dichlorobenzene | ND | 100 | μg/Kg |
| 20 | Benzene | ND | 50 | μg/Kg | 55 | n-Butylbenzene | 140 | 100 | μg/Kg |
| 21 | Dibromomethane | ND | 100 | μg/Kg | 56 | 1,2-Dibromo-3-chloropropane (DBCP) | ND | 600 | µg/Kg |
| 22 | 1,2-Dichloropropane | ND | 100 | μg/Kg | 57 | 1,2,4-Trichlorobenzene | ND | 400 | μg/Kg |
| 23 | Trichloroethene | ND | 100 | μg/Kg | 58 | Naphthalene | ND | 800 | μg/Kg |
| 24 | Bromodichloromethane | ND | 100 | μg/Kg | 59 | Hexachlorobutadiene | ND | 400 | μg/Kg |
| 25 | cis-1,3-Dichloropropene | ND | 100 | μg/Kg | 60 | 1,2,3-Trichlorobenzene | ND | 400 | μg/Kg |
| 26 | trans-1,3-Dichloropropene | ND | 100 | μg/Kg | 61 | Surr: 1,2-Dichloroethane-d4 | 91 | | %REC |
| 27 | 1.1.2-Trichloroethane | ND | 100 | μg/Kg | 62 | Surr: Toluene-d8 | 96 | | %REC |
| 28 | Toluene | ND | 50 | μg/Kg | 63 | Surr: 4-Bromofluorobenzene | 97 | | %REC |
| 29 | 1,3-Dichloropropane | ND | 100 | μg/Kg | | | | | |
| 30 | Dibromochloromethane | ND | 100 | μg/Kg | | | | | |
| 31 | 1,2-Dibromoethane (EDB) | ND | 400 | μg/Kg | | | | | |
| | | 1 | 1 | | | | | | |

Reporting Limits were increased due to high concentrations of non-target analytes.

ND

ND

ND

ND

EnCore sample was not received within the 48-hour extraction holding time. Sample was extracted 3 days and 2 hours, outside of holding time, and analyzed per client request.

ND = Not Detected

Tetrachloroethene

Chlorobenzene

Ethylbenzene

1,1,1,2-Tetrachloroethane

32

34

35

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

100

100

μg/Kg

μg/Kg

μg/Kg

μg/Kg

7/21/05 Report Date



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: T0102

Alpha Analytical Number: BMI05071561-08A

Client I.D. Number: 1523-BS6

Attn: **Bob Janosy**

Phone: (614) 424-7160 Fax:

(614) 424-3667

Sampled: 07/12/05

Received: 07/15/05 Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

| | | | Reporting | | | | Reportii | ng |
|----|--------------------------------|---------------|-----------|------|------------------------------------|---------------|----------|-------|
| | Compound | Concentration | Limit | _ | Compound | Concentration | Limit | |
| 1 | Dichlorodifluoromethane | ND | 200 μg/Kg | 36 | m,p-Xylene | ND | 100 | μg/Kg |
| 2 | Chloromethane | ND | 400 μg/Kg | 37 | Bromoform | ND | 200 | µg/Kg |
| 3 | Vinyl chloride | ND | 200 μg/Kg | 38 | Styrene | ND | 200 | μg/Kg |
| 4 | Chloroethane | ND | 200 μg/Kg | 39 | o-Xylene | ND | 100 | µg/Kg |
| 5 | Bromomethane | ND | 800 µg/Kg | 40 | 1,1,2,2-Tetrachloroethane | ND | 200 | μg/Kg |
| 6 | Trichlorofluoromethane | ND | 200 μg/Kg | 41 | 1,2,3-Trichloropropane | ND | 800 | µg/Kg |
| 7 | 1,1-Dichloroethene | ND | 200 μg/Kg | 42 | lsopropylbenzene | ND | 200 | μg/Kg |
| 8 | Dichloromethane | ND | 800 μg/Kg | 43 | Bromobenzene | ND | 200 | µg/Kg |
| 9 | trans-1,2-Dichloroethene | ND | 200 μg/Kg | , 44 | n-Propylbenzene | ND | 200 | μg/Kg |
| 10 | Methyl tert-butyl ether (MTBE) | ND | 100 µg/Kg | y 45 | 4-Chlorotoluene | ND | 200 | µg/Kg |
| 11 | 1,1-Dichloroethane | ND | 200 μg/Kg | , 46 | 2-Chlorotoluene | ND | 200 | μg/Kg |
| 12 | cis-1,2-Dichloroethene | ND | 200 μg/Kg | 47 | 1,3,5-Trimethylbenzene | ND | 200 | μg/Kg |
| 13 | Bromochloromethane | ND | 200 μg/Kg | j 48 | tert-Butylbenzene | ND | 200 | μg/Kg |
| 14 | Chloroform | ND | 200 μg/Kg | , 49 | 1,2,4-Trimethylbenzene | ND | 200 | μg/Kg |
| 15 | 2,2-Dichloropropane | ND | 200 μg/Kg | 50 | sec-Butylbenzene | ND | 200 | μg/Kg |
| 16 | 1,2-Dichloroethane | ND | 200 μg/Kg | j 51 | 1,3-Dichlorobenzene | ND | 200 | µg/Kg |
| 17 | 1,1,1-Trichloroethane | ND | 200 μg/Kg | 52 | 1,4-Dichlorobenzene | ND | 200 | μg/Kg |
| 18 | 1.1-Dichloropropene | ND | 200 μg/Kg | 53 | 4-Isopropyltoluene | 210 | 200 | µg/Kg |
| 19 | Carbon tetrachloride | ND | 200 μg/Kg | 54 | 1,2-Dichlorobenzene | ND | 200 | µg/Kg |
| 20 | Benzene | ND | 100 μg/Kg | 55 | n-Butylbenzene | 230 | 200 | μg/Kg |
| 21 | Dibromomethane | ND | 200 μg/Kg | 56 | 1,2-Dibromo-3-chloropropane (DBCP) | ND | 1,200 | µg/Kg |
| 22 | 1,2-Dichloropropane | ND | 200 μg/Kg | 57 | 1,2,4-Trichlorobenzene | ND | 800 | μg/Kg |
| 23 | Trichloroethene | ND | 200 μg/Kg | 58 | Naphthalene | ND | 800 | µg/Kg |
| 24 | Bromodichloromethane | ND | 200 μg/Kg | 59 | Hexachlorobutadiene | ND | 800 | μg/Kg |
| 25 | cis-1,3-Dichloropropene | ND | 200 μg/Kg | 60 | 1,2,3-Trichlorobenzene | ND | 800 | µg/Kg |
| 26 | trans-1,3-Dichloropropene | ND | 200 μg/Kg | 61 | Surr: 1,2-Dichloroethane-d4 | 92 | | %REC |
| 27 | 1,1,2-Trichloroethane | ND | 200 μg/Kg | 62 | Surr: Toluene-d8 | 95 | | %REC |
| 28 | Toluene | ND | 100 μg/Kg | 63 | Surr: 4-Bromofluorobenzene | 97 | | %REC |
| 29 | 1,3-Dichloropropane | ND | 200 μg/Kg | j | | | | |
| 30 | Dibromochloromethane | ND | 200 μg/Kg | 1 | | | | |
| | | | | | | | | |

Reporting Limits were increased due to high concentrations of non-target analytes.

EnCore sample was not received within the 48-hour extraction holding time. Sample was extracted 3 days, outside of holding time, and analyzed per client request.

μg/Kg

µg/Kg

µg/Kg

μg/Kg

μg/Kg

200

200

200

ND = Not Detected

1,2-Dibromoethane (EDB)

1,1,1,2-Tetrachloroethane

Tetrachloroethene

Chlorobenzene Ethylbenzene

31

33

34

Kandy Saulmer

ND

ND ND

ND

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Report Date



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: T0102

Alpha Analytical Number: BMI05071561-09A

Client I.D. Number: 1523-BS8

Bob Janosy Attn:

Phone: (614) 424-7160 Fax:

(614) 424-3667

Sampled: 07/12/05

Received: 07/15/05 Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

| | Reporting | | | | | | | Reporti | ng |
|-----|--------------------------------|---------------|-------|-------|----|------------------------------------|---------------|---------|-------|
| | Compound | Concentration | Limit | | | Compound | Concentration | Limit | |
| 1 | Dichlorodifluoromethane | ND | 100 | μg/Kg | 36 | m,p-Xylene | ND | 50 | μg/Kg |
| 2 | Chloromethane | ND | 200 | μg/Kg | 37 | Bromoform | ND | 100 | μg/Kg |
| 3 | Vinyl chloride | ND | 100 | μg/Kg | 38 | Styrene | ND | 100 | μg/Kg |
| 4 | Chloroethane | ND | 100 | μg/Kg | 39 | o-Xylene | ND | 50 | µg/Kg |
| 5 | Bromomethane | ND | 400 | μg/Kg | 40 | 1,1,2,2-Tetrachloroethane | ND | 100 | μg/Kg |
| 6 | Trichlorofluoromethane | ND | 100 | μg/Kg | 41 | 1,2,3-Trichloropropane | ND | 400 | μg/Kg |
| 7 | 1,1-Dichloroethene | ND | 100 | μg/Kg | 42 | Isopropylbenzene | ND | 100 | μg/Kg |
| 8 | Dichloromethane | ND | 400 | μα/Kα | 43 | Bromobenzene | ND | 100 | μg/Kg |
| 9 | trans-1,2-Dichloroethene | ND | 100 | μg/Kg | 44 | n-Propylbenzene | ND | 100 | μg/Kg |
| 10 | Methyl tert-butyl ether (MTBE) | ND | 50 | μα/Kα | 45 | 4-Chlorotoluene | ND | 100 | μg/Kg |
| 11 | 1,1-Dichloroethane | ND | 100 | μg/Kg | 46 | 2-Chlorotoluene | ND | 100 | μg/Kg |
| 12 | cis-1,2-Dichloroethene | ND | 100 | μg/Kg | 47 | 1,3,5-Trimethylbenzene | ND | 100 | μg/Kg |
| 13 | Bromochloromethane | ND | 100 | μg/Kg | 48 | tert-Butylbenzene | ND | 100 | μg/Kg |
| 14 | Chloroform | ND | 100 | μg/Kg | 49 | 1,2,4-Trimethylbenzene | 300 | 100 | μg/Kg |
| 15 | 2,2-Dichloropropane | ND | 100 | μα/Kg | 50 | sec-Butylbenzene | 130 | 100 | μg/Kg |
| 16 | 1,2-Dichloroethane | ND | 100 | µg/Kg | 51 | 1,3-Dichlorobenzene | ND | 100 | μg/Kg |
| 17 | 1,1,1-Trichloroethane | ND | 100 | μg/Kg | 52 | 1,4-Dichlorobenzene | ND | 100 | μg/Kg |
| 18 | 1,1-Dichloropropene | ND | 100 | μg/Kg | 53 | 4-Isopropyltoluene | 100 | 100 | μg/Kg |
| 19 | Carbon tetrachloride | ND | 100 | μg/Kg | 54 | 1,2-Dichlorobenzene | ND | 100 | μg/Kg |
| 20 | Benzene | ND | 50 | µg/Kg | 55 | n-Butylbenzene | 210 | 100 | μg/Kg |
| 21 | Dibromomethane | ND | 100 | μg/Kg | 56 | 1,2-Dibromo-3-chloropropane (DBCP) | ND | 600 | μg/Kg |
| 22 | 1,2-Dichloropropane | ND | 100 | μg/Kg | 57 | 1,2,4-Trichlorobenzene | ND | 400 | μg/Kg |
| 23 | Trichloroethene | ND | 100 | μg/Kg | 58 | Naphthalene | ND | 1,000 | μg/Kg |
| 24 | Bromodichloromethane | ND | 100 | μg/Kg | 59 | Hexachlorobutadiene | ND | 400 | μg/Kg |
| 25 | cis-1,3-Dichloropropene | ND | 100 | μg/Kg | 60 | 1,2,3-Trichlorobenzene | ND | 400 | μg/Kg |
| 26 | trans-1,3-Dichloropropene | ND | 100 | μg/Kg | 61 | Surr: 1,2-Dichloroethane-d4 | 92 | | %REC |
| 27 | 1,1,2-Trichloroethane | ND | 100 | μα/Kg | 62 | Surr: Toluene-d8 | 95 | | %REC |
| 28 | Toluene | ND | 50 | μg/Kg | 63 | Surr: 4-Bromofluorobenzene | 95 | | %REC |
| 29 | 1,3-Dichloropropane | ND | 100 | μg/Kg | | | | | |
| 30 | Dibromochloromethane | ND | 100 | μg/Kg | | | | | |
| 31 | 1,2-Dibromoethane (EDB) | ND | 400 | μg/Kg | | | | | |
| 32 | Tetrachloroethene | ND | 100 | μg/Kg | | | | | |
| 33 | | ND | 100 | μg/Kg | | | | | |
| - 4 | 011 | ND | 100 | | | | | | |

Reporting Limits were increased due to high concentrations of non-target analytes.

EnCore sample was not received within the 48-hour extraction holding time. Sample was extracted 3 days, outside of holding time, and analyzed per client request.

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

μg/Kg

µg/Kg

ND = Not Detected

Chlorobenzene

Ethylbenzene

Roger Scholl Kandy Saulner

ND

ND

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Report Date

Page 1 of 1

7/21/05



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute 505 King Avenue

Columbus, OH 43201 Job#: T0102 Attn: Bob Janosy Phone: (614) 424-7160

Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-01A

Client I.D. Number: 1523-SW3-10

Sampled: 07/12/05 Received: 07/15/05

Analyzed: 07/19/05

Semivolatile Organics by GC/MS EPA Method SW8270C

| | | | Reporting |
|----|------------------------|---------------|--------------|
| | Compound | Concentration | Limit |
| 1 | Naphthalene | ND | 13,000 µg/Kg |
| 2 | Acenaphthylene | ND | 13,000 µg/Kg |
| 3 | Acenaphthene | ND | 13,000 µg/Kg |
| 4 | Fluorene | ND | 13,000 µg/Kg |
| 5 | Phenanthrene | ND | 13,000 µg/Kg |
| 6 | Anthracene | ND | 13,000 µg/Kg |
| 7 | Fluoranthene | ND | 13,000 µg/Kg |
| 8 | Pyrene | ND | 13,000 µg/Kg |
| 9 | Benzo(a)anthracene | ND | 13,000 µg/Kg |
| 10 | Chrysene | ND | 13,000 µg/Kg |
| 11 | Benzo(b)fluoranthene | ND | 13,000 µg/Kg |
| 12 | Benzo(k)fluoranthene | ND | 13,000 µg/Kg |
| 13 | Benzo(a)pyrene | ND | 13,000 µg/Kg |
| 14 | Indeno(1,2,3-cd)pyrene | ND | 13,000 µg/Kg |
| 15 | Dibenz(a,h)anthracene | ND | 13,000 µg/Kg |
| 16 | Benzo(g,h,i)perylene | ND | 13,000 µg/Kg |
| 17 | Surr: Nitrobenzene-d5 | 86 | %REC |
| 18 | Surr: 2-Fluorobiphenyl | 100 | %REC |
| 19 | Surr: 4-Terphenyl-d14 | 94 | %REC |

Reporting Limits were increased due to the hydrocarbons present in the sample.

ND = Not Detected

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Report Date



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: T0102 Attn:

Bob Janosy

Phone: (614) 424-7160

Fax:

(614) 424-3667

Alpha Analytical Number: BMI05071561-02A

Client I.D. Number: 1523-SW3-10 DUP

Sampled: 07/12/05

Received: 07/15/05 Analyzed: 07/19/05

Semivolatile Organics by GC/MS EPA Method SW8270C

| | | | Reporting |
|----|------------------------|---------------|--------------|
| | Compound | Concentration | Limit |
| 1 | Naphthalene | ND | 13,000 µg/Kg |
| 2 | Acenaphthylene | ND | 13,000 µg/Kg |
| 3 | Acenaphthene | ND | 13,000 µg/Kg |
| 4 | Fluorene | ND | 13,000 µg/Kg |
| 5 | Phenanthrene | ND | 13,000 µg/Kg |
| 6 | Anthracene | ND | 13,000 µg/Kg |
| 7 | Fluoranthene | ND | 13,000 µg/Kg |
| 8 | Pyrene | ND | 13,000 µg/Kg |
| 9 | Benzo(a)anthracene | ND | 13,000 µg/Kg |
| 10 | Chrysene | ND | 13,000 µg/Kg |
| 11 | Benzo(b)fluoranthene | ND | 13,000 µg/Kg |
| 12 | Benzo(k)fluoranthene | ND | 13,000 µg/Kg |
| 13 | Benzo(a)pyrene | ND | 13,000 µg/Kg |
| 14 | Indeno(1,2,3-cd)pyrene | ND | 13,000 µg/Kg |
| 15 | Dibenz(a,h)anthracene | ND | 13,000 µg/Kg |
| 16 | Benzo(g,h,i)perylene | ND | 13,000 µg/Kg |
| 17 | Surr: Nitrobenzene-d5 | 85 | %REC |
| 18 | Surr: 2-Fluorobiphenyl | 89 | %REC |
| 19 | Surr: 4-Terphenyl-d14 | 87 | %REC |

Reporting Limits were increased due to the hydrocarbons present in the sample.

ND = Not Detected

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

7/21/05

Report Date



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute 505 King Avenue Columbus, OH 43201

Job#: T0102

Attn: Bob Janosy

Phone: (614) 424-7160

Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-03A

Client I.D. Number: 1523-SW7

Sampled: 07/12/05

Received: 07/15/05 Analyzed: 07/19/05

Semivolatile Organics by GC/MS EPA Method SW8270C

| | | | Reporting |
|----|------------------------|---------------|-------------|
| | Compound | Concentration | Limit |
| 1 | Naphthalene | ND | 6,600 µg/Kg |
| 2 | Acenaphthylene | ND | 6,600 µg/Kg |
| 3 | Acenaphthene | ND | 6,600 µg/Kg |
| 4 | Fluorene | ND | 6,600 µg/Kg |
| 5 | Phenanthrene | ND | 6,600 µg/Kg |
| 6 | Anthracene | ND | 6,600 µg/Kg |
| 7 | Fluoranthene | ND | 6,600 µg/Kg |
| 8 | Pyrene | ND | 6,600 µg/Kg |
| 9 | Benzo(a)anthracene | ND | 6,600 µg/Kg |
| 10 | Chrysene | ND | 6,600 µg/Kg |
| 11 | Benzo(b)fluoranthene | ND | 6,600 µg/Kg |
| 12 | Benzo(k)fluoranthene | ND | 6,600 µg/Kg |
| 13 | Benzo(a)pyrene | ND | 6,600 µg/Kg |
| 14 | Indeno(1,2,3-cd)pyrene | ND | 6,600 µg/Kg |
| 15 | Dibenz(a,h)anthracene | ND | 6,600 µg/Kg |
| 16 | Benzo(g,h,i)perylene | ND | 6,600 µg/Kg |
| 17 | Surr: Nitrobenzene-d5 | 81 | %REC |
| 18 | Surr: 2-Fluorobiphenyl | 85 | %REC |
| 19 | Surr: 4-Terphenyl-d14 | 85 | %REC |

Reporting Limits were increased due to the hydrocarbons present in the sample.

ND = Not Detected

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

7/21/05

Report Date



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute 505 King Avenue

Columbus, OH 43201 Job#: T0102 Attn: Bob Janosy Phone: (614) 424-7160

Fax: (614) 424-3667

30077. 10102

Alpha Analytical Number: BMI05071561-08A

Client I.D. Number: 1523-BS6

Sampled: 07/12/05

Received: 07/15/05 Analyzed: 07/19/05

Semivolatile Organics by GC/MS EPA Method SW8270C

| | | | Reporting |
|----|------------------------|---------------|-------------|
| | Compound | Concentration | Limit |
| 1 | Naphthalene | ND | 6,600 µg/Kg |
| 2 | Acenaphthylene | ND | 6,600 µg/Kg |
| 3 | Acenaphthene | ND | 6,600 µg/Kg |
| 4 | Fluorene | ND | 6,600 µg/Kg |
| 5 | Phenanthrene | ND | 6,600 µg/Kg |
| 6 | Anthracene | ND | 6,600 µg/Kg |
| 7 | Fluoranthene | ND | 6,600 µg/Kg |
| 8 | Pyrene | ND | 6,600 µg/Kg |
| 9 | Benzo(a)anthracene | ND | 6,600 µg/Kg |
| 10 | Chrysene | ND | 6,600 µg/Kg |
| 11 | Benzo(b)fluoranthene | ND | 6,600 µg/Kg |
| 12 | Benzo(k)fluoranthene | ND | 6,600 µg/Kg |
| 13 | Benzo(a)pyrene | ND | 6,600 µg/Kg |
| 14 | Indeno(1,2,3-cd)pyrene | ND | 6,600 µg/Kg |
| 15 | Dibenz(a,h)anthracene | ND | 6,600 µg/Kg |
| 16 | Benzo(g,h,i)perylene | ND | 6,600 µg/Kg |
| 17 | Surr: Nitrobenzene-d5 | 83 | %REC |
| 18 | Surr: 2-Fluorobiphenyl | 93 | %REC |
| 19 | Surr: 4-Terphenyl-d14 | 90 | %REC |

Reporting Limits were increased due to the hydrocarbons present in the sample.

ND = Not Detected

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Report Date



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: T0102 Attn:

Bob Janosy

Phone: (614) 424-7160

Fax:

(614) 424-3667

Alpha Analytical Number: BMI05071561-09A

Client I.D. Number: 1523-BS8

Sampled: 07/12/05

Received: 07/15/05 Analyzed: 07/19/05

Semivolatile Organics by GC/MS EPA Method SW8270C

| | | | Reporting |
|----|------------------------|---------------|--------------|
| | Compound | Concentration | Limit |
| 1 | Naphthalene | ND | 13,000 µg/Kg |
| 2 | Acenaphthylene | ND | 13,000 µg/Kg |
| 3 | Acenaphthene | ND | 13,000 µg/Kg |
| 4 | Fluorene | ND | 13,000 µg/Kg |
| 5 | Phenanthrene | ND | 13,000 µg/Kg |
| 6 | Anthracene | ND | 13,000 µg/Kg |
| 7 | Fluoranthene | ND | 13,000 µg/Kg |
| 8 | Pyrene | ND | 13,000 µg/Kg |
| 9 | Benzo(a)anthracene | ND | 13,000 µg/Kg |
| 10 | Chrysene | ND | 13,000 µg/Kg |
| 11 | Benzo(b)fluoranthene | ND | 13,000 µg/Kg |
| 12 | Benzo(k)fluoranthene | ND | 13,000 µg/Kg |
| 13 | Benzo(a)pyrene | ND | 13,000 µg/Kg |
| 14 | Indeno(1,2,3-cd)pyrene | ND | 13,000 µg/Kg |
| 15 | Dibenz(a,h)anthracene | ND | 13,000 µg/Kg |
| 16 | Benzo(g,h,i)perylene | ND | 13,000 µg/Kg |
| 17 | Surr: Nitrobenzene-d5 | 81 | %REC |
| 18 | Surr: 2-Fluorobiphenyl | 103 | %REC |
| 19 | Surr: 4-Terphenyl-d14 | 99 | %REC |

Reporting Limits were increased due to the hydrocarbons present in the sample.

ND = Not Detected

Roger Scholl Kandy Saulman Oalter Archive Roger L. Scholl, Ph.D., Laboratory Director · Randy Gardner, Laboratory Manager · · Walter Hinchman, Quality Assurance Officer Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Report Date Page 1 of 1



DAILY FIELD REPORT

| Page | 1 | of | |
|------|---|----|--|
| | | | |

Date: 7/13/05

| Job Name: <u>PEDLETON GITE #1523</u> Job No.: <u>24-01.01</u> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Address: 114 St., BLOX#1523, CAMP PENDETON |
| Client/Contractor: EFR ENTROWMENTAL SERVICES |
| Field Report Notice to Comply |
| Type of Service Performed: Soil Concrete Structural Steel Waterproofing Asphalt Concrete Pre-Stress Concrete Fireproofing Roofing Engr. Observation Masonry Other |
| Inspection Check List: Soils Report Plans Specs. RFI Codes |
| Building Permit #:Plan File #:DSA#:OSHPD#: |
| On-Site Equipment: Kabel CO 135 EXAVAGER; DEERE 544 LOADER |
| ☐ Tests Performed (see attached) No Sample Type: When x |
| On-9ite 10:35 am |
| · EXCAVATION OF CONTAMINATED SOIL APPROX. 12' DEEP |
| 40 × 25' DIMPUSION (IRREGULAR) - PHOTOS 1-9 |
| * INTO FORMATIONAL MATURIAL AT - 12" BGS |
| -> FORMATIONAL MAT'L IS SILT STONE/SANDSTONE W/ CUBBLUS |
| AND BULLDERS TO 18" \$ |
| · WALLS ARE RELATIVELY VERTICAL AND FREE OF 1005E |
| DEBRIS+ SLOUGH. |
| · BOTTOM is FIRM + UNTEILDING, CUT INTO FORMATION AL MAT'L |
| - JOME LOOSE MAT'L AND BOULDERS ARE AT BOTTOM |
| LO REPORTEDLY WILL BE REMOVED/CLEANED PRIOR TO BACKFILL |
| - BALKFILL- AS REPORTED BY CHENT CONTEMTOR: |
| -73/4" ROCK FROM 12 TO 2 FEET BLOS, TAMPED W/ EXCAN. |
| BULKET + WHOOL RULLED W/ LOADER |
| -> UPPER 2 FEET NATIVE SPOILS , to 95% (SAMPLED FOR MAX) |
| Time In/Out |
| CERTIFICATE OF COMPLIANCE: All of the observed work, unless otherwise stated, is in conformance with the approved plans and specifications and the workmanship provisions of the applicable code. For any "non conforming" items the contractor shall schedule for reinspection and retesting. |
| Inspectors Signature/Name: (440 Davis Cert No. C59908 |
| Approval Signature/Company/Name: |



Approval Signature/Company/Name:_____

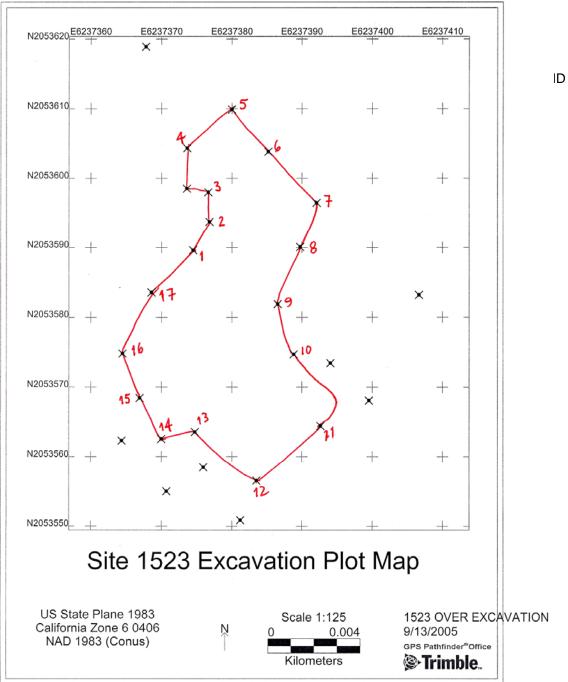
DAILY FIELD REPORT

Page 1 of _____

DUDLETON # 1523 Job No.: 24-01.01 Job Name: Address: Camp Pendleten, Bldg #1523 Client/Contractor: Field Report **Notice to Comply** Type of Service Performed: Soil Structural Steel Concrete Waterproofing Asphalt Concrete Pre-Stress Concrete Engr. Observation Fireproofing Roofing Masonry Other___ Soils Report Plans Specs. RFI ☐ Codes Inspection Check List: _OSHPD#:_ Building Permit #:______Plan File #:___ _DSA#:_____ On-Site Equipment: Vise Roller Walker RD380 Sample Type: Tests Performed (see attached) 141 Time In/Out 8:00 m 9: CERTIFICATE OF COMPLIANCE: All of the observed work, unless otherwise stated, is in conformance with the approved plans and specifications and the workmanship provisions of the applicable code. For any "non conforming" items the contractor shall schedule for reinspection and retesting. CHAD DAVIS Cert No. C59908 Inspectors Signature/Name:_ Date:

Page ____ of ____

| | 4320 | EARTH & MATERIALS, INC. VIEWRIDGE AVE, STE D IN DIEGO, CA 92123 858-292-7575 | NUCLEAR GAUGE RELATIVE | | | Report No.: NA Permit No.: NA | | | | |
|--------|--------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------|--------------------------------|-------------------------------------------------|---------------------|-------------------------|--|
| | Project Name: PENDITION SITE#1523 Project Location: Camp PENDUTON | | | | | | Proj. No: <u>24-01.01</u> Client: <u>EFR</u> | | | |
| | | fomed for: | Native Import Type II Type I Asphalt Wix (see page 1) Grading Curb, Sidewalk, Valley Gutters Wall Backfill Trench Sewer Other Parking Lot 5.6. Proj. No: | | | | | ters | | |
| | | ical Report by: WA I % Compaction: 95% | | Proj. No: | | 8,0 of | Date: | | | |
| r | Test # | Location/Lot# | Elevation | Depth of Fill | Dry Density pcf | % Moisture Content | % Comp. | Max. Dry Density | Meets Spec. (Y/N) | |
| 1 min_ | / | See diagram, | 56 | 2' ± | 129.8 | 8.6 | 99,5 | 130,5 | 7 | |
| 10 | 2 | page I | 1 | 2'± | 127.7 | 11.1 | 97,9 | 130.5 | Y | |
| | 3a |) | | 2' t | 122.4 | 9.4 | 93,8 | 130.5 | N | |
| | 36 | (| 4 | Z' ± | 122,9 | 8.1 | 94,9 | 130,5 | Y | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | <u> </u> | | | |
| | | | | | | ! | | | | |
| | | | | | | | | | | |
| | | * turned gange 90 | + 180- | 44/4 | <i>f</i> 3 | +05+4 | = /23 | 9 oct | | |
| | | There gange 10 | 7 100 | averag | | 1 57/ | | 10011 | | |
| | | | | | į | | | | | |
| | | | | | | | | | | |
| | | | | Inspectors Na | ame: (·) | DAVIS | 5 | | | |



| ID | Easting | Northing |
|----|-------------|-------------|
| 1 | 6237374.449 | 2053589.599 |
| 2 | 6237376.781 | 2053593.757 |
| 3 | 6237376.606 | 2053597.998 |
| 4 | 6237373.620 | 2053604.311 |
| 5 | 6237379.988 | 2053609.871 |
| 6 | 6237385.206 | 2053603.822 |
| 7 | 6237392.090 | 2053596.477 |
| 8 | 6237389.747 | 2053590.056 |
| 9 | 6237386.539 | 2053581.874 |
| 10 | 6237388.836 | 2053574.707 |
| 11 | 6237392.652 | 2053564.445 |
| 12 | 6237383.506 | 2053556.523 |
| 13 | 6237374.711 | 2053563.563 |
| 14 | 6237369.960 | 2053562.566 |
| 15 | 6237366.913 | 2053568.427 |
| 16 | 6237364.495 | 2053574.800 |
| 17 | 6237368.565 | 2053583.532 |



G E

0

CANDELARIA ENVIRONMENTAL

BIOTREATMENT FACILITY NON-HAZARDOUS MATERIALS HAULING MANIFEST

| NAME: AC/S ENVIRONMENTAL SECURTIY (U | ST SITE 1523) |
|------------------------------------------------|--------------------------|
| D O DOY EFFORS | 760) 725-4275/42 |
| CITY, STATE, ZIP CAMP PENDLETON, CA 92055 | APN: 2005-36 |
| | |
| WASTE DESCRIPTION NON-HAZ SOIL GENE | RATING PROCESS UST LEAK |
| COMPONENTS OF WASTE (PPM) | COMPONENTS OF WASTE (PPM |
| DIESEL-IMPACTED SOIL | |
| DIEGER-IHI KOTED SOTE | |
| | |
| DDODEDTIES COLID VEC | |
| PROPERTIES: SOLID YES | CLOTHING |
| HANDLING INSTRUCTIONS WEAR APPROPRIATE | CLOTHING |
| | |
| GENERATOR CERTIFIES THAT THESE WASTES ARE RCR. | |
| HAZARDOUS, BASED ON THE INFORMATION PROVIDED B | |
| APPLICATION AND THE ACCOMPANYING LABORATORY DA | AIA |
| BY: popular normanie D. Delector | DATE: 7-13-05 |
| Signature / Print or Type Full Name | |
| | |
| COMPANY NAME /SU/) S PH | HONE NO. 619-561-3963 |
| ADDRESS LAKELIUZ (VE SE | ERVICE ORDER NO. |
| | CK UP DATE 7-13-05 |
| TRUCK TYPE: DUMP ROLL OFF OTHER | <u>요</u> |
| TOUGH # 20 75 679 | |
| TRUCK LIC. # CD75529 TF | RUCK ID # 1202 |
| DRIVER NAME GORDON TAMPLIX TF | RAILER LIC. # |
| DITIVELLIAMILE CORDON LAMBELLA | MILLITEIO. # |
| DRIVER SIGNATURE | TRAILER ID # /2027 |
| | 72001 |
| TIME LEFT JOB 7.10 Am | LOAD #/ |
| | 1 |
| JOB SITE REPRESENTATIVE | |

ROCESSO

R

P.

Deliver to facility Location:

CANDELARIA ENVIRONMENTAL

4001 Candelaria Lane Anza, CA 92539

(951) 763-0129

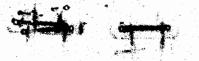
Main office:

Name

Phone:(619) 696-6207 FAX (619) 696-5117

24 hr Emergency (619) 696-6207

Signature



THE MAN PLACE TO SEE STATE OF THE PARTY OF T

| NAME: AC/S ENVIRONMENTAL SECUR | TIY (US | SITE 152 | 3) | |
|-----------------------------------------------------------------------------|--------------------|--------------------------------|-------------|---------------|
| ADDRESS: P.O. BOX 555008 CITY, STATE, ZIP CAMP PENDLETON, | | PHONE NO | (760) | 725-4375/4321 |
| CITY, STATE, ZIPCAMP_PENDLETON, | CA 92055 | APN: | 20 | 05-36 |
| | | | | |
| WASTE DESCRIPTION NON-HAZ SOIL | GENER | | | |
| COMPONENTS OF WASTE (PPM) | | COMPC | NEN IS OF | WASTE (PPM) |
| DIESEL-IMPACTED SOIL | | | | |
| | | | | |
| | | | | |
| PROPERTIES: SOLID YES | | | | |
| HANDLING INSTRUCTIONS: WEAR APPE | ROPRIATE C | OTHING | | |
| | | | | |
| GENERATOR CERTIFIES THAT THESE WASTES HAZARDOUS, BASED ON THE INFORMATION P | PROVIDED BY | THE GENERAT | | 1 . |
| APPLICATION AND THE ACCOMPANYING LABO | DRATORY DA | A | | |
| BY: Andila lite arminiel D. seleter | _ | D | ATE: | 7-13-05 |
| Signature / Print or Type Full Name | | | | |
| | | | <u> </u> | |
| ADDRESS DIE WEST COAST ROW | CEL K-76 NO 5H(| ONE NO. 6 (| 7 561 | -3703 |
| ADDRESS POBY 1541 | | IVICE ORDER KUP DATE | NU. | |
| TRUCK TYPE: DUMP ROLL OFF | OTHER | (Of DAIL | | |
| | | _ | | |
| TRUCK LIC. # C 474 494 | TRL | ICK ID#_ | 64-15 | |
| | | | 15 | 2001 |
| DRIVER NAME, S.L. KEAN | IRA | ILER LIC. #_ | 46613 | 884 |
| DRIVER SIGNATURE | | TRAILER | 2 ID # | |
| DITIVELLOIGIVATORE | *, | INAILLI | 11D# | |
| TIME LEFT JOB 7:15 m | | LOAD# | - | |
| | | | | |
| JOB SITE REPRESENTATIVE | | 1 | | |
| Name | | Si | gnature | |
| | | | | |
| | | | | |
| Deliver to facility Location: CANDELARIA ENVIRONMENTAL | Main o | | 207 | 110 |
| 4001 Candelaria Lane | | e:(619) 696-6: 610) 606-511 | | |
| Anza, CA 92539 | | 619) 696-511 mergency (6 | | 7/0 |
| (951) 763-0129 | 24 E | mengency (o | 13) 030-020 | |
| (301) 700-0123 | | | | |



A STATE OF THE STA

| NAME: AC/S ENVIRONMENTAL SECUR | |
|---------------------------------------------------------|------------------------------------------------------|
| ADDRESS: P.O. BOX 555008 CITY STATE ZIP CAMP PENDLETON, | PHONE NO. (760) 725-4375/43 CA 92055 APN: 2005-36 |
| CITY, STATE, ZIP CAMP PENDLETON, | APN: 2003-36 |
| 하는 장마를 다른 바람이 존대하다 모다. | |
| WASTE DESCRIPTION NON-HAZ SOIL | |
| COMPONENTS OF WASTE (PPM) | COMPONENTS OF WASTE (PPM |
| DIESEL-IMPACTED SOIL | |
| - DINGER INITIONED BOTH | |
| | 원인 10년 1일 |
| PROPERTIES: SOLID YES | 보다 사람들은 사람들은 사람들은 사람들이 되었다. |
| HANDLING INSTRUCTIONS: WEAR APPI | POPPIATE OI OTHING |
| HANDLING INSTRUCTIONS. WEAR AFFI | HOFRIATE GLOTHING |
| | |
| GENERATOR CERTIFIES THAT THESE WASTE | S ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON- |
| | PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE |
| APPLICATION AND THE ACCOMPANYING LABO | ORATORY DATA |
| BY: Mill uppenied D. Dele | DATE: 7-13-05 |
| Signature / Print or Type Full Name | DATE: |
| Signature / Filit of Type Full Name | |
| COMPANY NAME WEST COAST | PHONE NO (619)443-4200 |
| ADDRESS POBOX 1521 | SERVICE ORDER NO. |
| CITY, STATE, ZIP CAICUSIDES | A. PICK UP DATE 7-/7-05 |
| TRUCK TYPE: DUMP ROLL OF | OTHER |
| $\overline{\mathcal{O}}_{a_1}$ | |
| TRUCK LIC. # | TRUCK ID # 9/7-27 |
| | (11 00 |
| DRIVER NAME Peter Goves | TRAILER LIC. # GTG5959 |
| 2011-5- 01011-125- D | 10 A B C 10 3 5 |
| DRIVER SIGNATURE Level | TRAILER ID # #917-2 |
| TIME LEET 100 7 : 2 () | 1040# 7 |
| TIME LEFT JOB / · 2 C | LOAD # |
| IOR SITE DEDDESENTATIVE | C 11 |
| JOB SITE REPRESENTATIVE Chouse | |
| Name | Signature |
| | |
| Deliver to facility Location: | Main office. |
| CANDELARIA ENVIRONMENTAL | Main office: |
| 4001 Candelaria Lane | Phone:(619) 696-6207 |
| | FAX (619) 696-5117 |
| Anza, CA 92539 | 24™ Emergency (619) 696-6207 |
| (951) 763-0129 | |

CANDELARIA ENVIRONMENTÁL BIOTREATMENT FACILITY

NON-HAZARDOUS MATERIALS HAULING MANIFEST

| NAME: AC/S ENVIRONMENTAL SECUR | TIY (UST SITE 152: | 3) |
|--------------------------------------------------------------------------------|---------------------------------------|--------------------------------|
| ADDRESS: P.O. BOX 555008 CITY, STATE, ZIP CAMP PENDLETON, | PHONE NO | (760) 725-4375/4321 2005-36 |
| CITY, STATE, ZIP CAMP PENDLETON. | CA 92033 APN: | 2003-30 |
| WASTE DESCRIPTION NON-HAZ SOIL | GENERATING PROC | ESS HOW THAT |
| COMPONENTS OF WASTE (PPM) | | NENTS OF WASTE (PPM) |
| | | |
| DIESEL-IMPACTED SOIL | | |
| | | |
| DEODEDITIES, COLID., VEG | | |
| PROPERTIES: SOLID <u>YES</u> HANDLING INSTRUCTIONS: WEAR APPR | POPRIATE OF OTHING | |
| HANDLING INSTITUCTIONS. WEAR AF FI | TOP HIATE OLOTPING | |
| | | |
| GENERATOR CERTIFIES THAT THESE WASTER HAZARDOUS, BASED ON THE INFORMATION F | | |
| APPLICATION AND THE ACCOMPANYING LABO | | |
| BY And Doll marine D. Dele | 1 | 7 12 65 |
| Signature / Print or Type Full Name | 7. ~ U/ | ATE: 7-13-05 |
| -oignature / Trint of Type Tuli Name | | |
| COMPANY NAME GUEST COAS | | 19) 443-4200 |
| ADDRESS PO. Sox 152 | SERVICE ORDER | |
| CITY, STATE, ZIP LAKES BUE CA | 9 , PICK UP DATE OTHER | 7-13-05 |
| 111 | - | |
| TRUCK LIC. # 172599 | TRUCK ID # | 817-45 |
| | | 117.19177 |
| DRIVER NAME Michael Ellis | · · · · · · · · · · · · · · · · · · · | 4EV9157 |
| DRIVER SIGNATURE MICHAE 19 | TONIED | ID# 9/7-457 |
| Brive rolatione TV TC Nass | INAILEN | 10#_//_/3/ |
| TIME LEFT JOB 7,70 | LOAD# | 4 11 |
| 1 | | 1/100/11 |
| JOB SITE REPRESENTATIVE | CLARIL / | f HH |
| Name | U Sig | nature |
| | | |
| Deliver to facility Location: | Main office | |
| CANDELARIA ENVIRONMENTAL | Main office: Phone (619) 696-62 | 207 |
| 4001 Candelaria Lane | FAX (619) 696-5117 | 11. |
| Anza, CA 92539 | 24 hr Emergency (61 | |
| (951) 763-0129 | | // 4 |

| ADDRESS: P.O. BOX 555008 CITY, STATE, ZIP CAMP PENDLETON, CA 92055 WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS LIST LEAK COMPONENTS OF WASTE (PPM) DIESEL-IMPACTED SOIL PROPERTIES: SOLID YES HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCA APPLICATION AND THE ACCOMPANYING LABORATORY DATA BY: Manual Companying Laboratory Data BY: Manual Companying Laboratory Data BY: Manual Companying Laboratory Data COMPANY NAME WEST CASST PHONE NO (17) 1/4/3 - 4/20 D ADDRESS COMPANYING LABORATORY DATE: 7-13-95 CITY, STATE, ZIP LALISTOCK SERVICE ORDER NO PICK UP DATE 7-13-95 TRUCK LIC. # 74492 TRUCK ID # 9CC-1 DRIVER NAME DAY BOUDERAUS TRAILER LIC. # 4 DF 3/95 DRIVER SIGNATURE DAY TRAILER LIC. # 4 DF 3/95 DRIVER SIGNATURE DAY TRAILER LIC. # 9CC-1 TIME LEFT JOB THE CARLO NAME CARLO NAME DAY TRAILER LIC. # 4 DF 3/95 DOB SITE REPRESENTATIVE LALIC NAME SIGNATURE NAME DAY TRAILER LIC. # 4 DF 3/95 Deliver to facility Location: Main office: | NAME: AC/S ENVIRONMENTAL SECUR | TIY (UST SITE 1523) |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|------------------------------------------------|
| WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS LIST LEAK COMPONENTS OF WASTE (PPM) DIESEL-IMPACTED SOIL PROPERTIES: SOLID YES HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCA APPLICATION AND THE ACCOMPANYING LABORATORY DATA BY: AND AND AND THE ACCOMPANYING LABORATORY DATA BY: AND | ADDRESS: P.O. BOX 555008 | PHONE NO. (760) 725-4375/43: |
| COMPONENTS OF WASTE (PPM) DIESEL-IMPACTED SOIL PROPERTIES: SOLID YES HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA BY: JUNE 1 Date 1 Date 1 DATE: 7-13-05 Signature / Print or Type Full Name COMPANY NAME WEST CAST PHONE NO (11) 443-420 D SERVICE ORDER NO. PICK UP DATE 7-13-05 TRUCK TYPE: DUMP ROLL OFF OTHER TRUCK LIC. # 9 C C - 1 DRIVER NAME DATA BOUDER AUX TRAILER LIC. # 4 DF 3/95 DRIVER SIGNATURE AND TRAILER LIC. # 4 DF 3/95 DRIVER SIGNATURE AND LOAD # 5 JOB SITE REPRESENTATIVE LAKE NAME SIGNATURE SIGNATURE AND LOAD # 5 Deliver to facility Location: Main office: | CITY, STATE, ZIP CAMP PENDLETON, C | CA 92055 APN: 2005-36 |
| COMPONENTS OF WASTE (PPM) DIESEL-IMPACTED SOIL PROPERTIES: SOLID YES HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCA APPLICATION AND THE ACCOMPANYING LABORATORY DATA BY SIGNATURE Print or Type Full Name COMPANY NAME WEST COAST PHONE NO (11)443-4200 SERVICE ORDER NO. CITY, STATE, ZIP SERVICE ORDER NO. PICK UP DATE 7-13-05 TRUCK LIC. # 9 C C - 1 DRIVER NAME DAYN BOUDKERAUS TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE TO THE SIGNATURE OF TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE OF TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE OF TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE OF TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE OF TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE OF TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE OF TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE OF TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE OF TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE OF TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE OF TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE OF TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE OF TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE OF TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE OF TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE OF TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE OF TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE OF TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE OF TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE OF TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE OF TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE OF TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE OF TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE OF TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE OF TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE OF TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE OF TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE OF TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE OF TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE OF TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE OF TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE OF TRAILER | | |
| PROPERTIES: SOLID YES HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCA APPLICATION AND THE ACCOMPANYING LABORATORY DATA BY: WASTER LOOK TO TYPE Full Name COMPANY NAME WAST CAST PHONE NO (11)443-420-20 SERVICE ORDER NO. CITY, STATE, ZIP LAWS DOCK SOIL SERVICE ORDER NO. CITY, STATE, ZIP LAWS DOCK SOIL STATE, ZIP LAWS DOCK SOIL STATE, ZIP LAWS DOCK SOIL STATE, ZIP TRUCK TYPE: DUMP ROLL OFF OTHER TRUCK LIC. # TO THE TRUCK ID # 9 C C - 1 DRIVER NAME DAN BOUDER BUY TRAILER LIC. # 4 DF 3 1 95 DRIVER SIGNATURE OF TRUCK ID # 9 C C - 1 TIME LEFT JOB 7.40 LOAD # 5 JOB SITE REPRESENTATIVE LAKE NAME SIGNATURE OF THE SI | | |
| PROPERTIES: SOLID YES HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCA APPLICATION AND THE ACCOMPANYING LABORATORY DATA BY: AND AND THE ACCOMPANYING LABORATORY DATA BY: PROPERTIES: THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, AND | COMPONENTS OF WASTE (PPM) | COMPONENTS OF WASTE (PPM |
| HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA BY: Application and the accompanying Laboratory Data BY: Application and the accompanying Laboratory Data BY: Application and the soil acceptance APPLICATION | DIESEL-IMPACTED SOIL | |
| HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA BY: Application and the accompanying Laboratory Data BY: Application and the accompanying Laboratory Data BY: Application and the soil acceptance APPLICATION | | |
| HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA BY: A DECEMBER OF THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANY DATA BY: A DECEMBER OF THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE SOIL ACCEP | | |
| GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA BY: | PROPERTIES: SOLID YES | |
| HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA BY: DATE: 7-13-05 DATE | HANDLING INSTRUCTIONS: WEAR APPR | ROPRIATE CLOTHING |
| HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA BY: DATE: 7-13-05 DATE: 7- | | |
| HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA BY: DATE: 7-13-05 DATE: 7 | GENERATOR CERTIFIES THAT THESE WASTES | S ARE BORA NON-HAZARDOUS AND CALIFORNIA NON- |
| BY: Signature / Print or Type Full Name COMPANY NAME WEST CAST PHONE NO (11) 443-4200 ADDRESS O BOX 152 SERVICE ORDER NO. CITY, STATE, ZIP 1445 DC. PICK UP DATE 7-13-05 TRUCK TYPE: DUMP 1 ROLL OFF OTHER TRUCK LIC. # 74492 TRUCK ID # 966-1 DRIVER NAME DHN BOUDERBUY TRAILER LIC. # 4DF 3195 DRIVER SIGNATURE OF TRUCK ID # 966-17 TIME LEFT JOB 7.40 LOAD # 5 JOB SITE REPRESENTATIVE 14501 CARL Name Signature Deliver to facility Location: Main office: | HAZARDOUS, BASED ON THE INFORMATION PR | ROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANC |
| COMPANY NAME WEST CAST PHONE NO. (11) 4/3-4200 ADDRESS CO. AOX 52/ SERVICE ORDER NO. CITY, STATE, ZIP 14 COST PICK UP DATE 7-13-05 TRUCK TYPE: DUMP ROLL OFF OTHER TRUCK LIC. # POWER BOUDER AUX TRAILER LIC. # 4 DF 3195 DRIVER NAME DHA BOUDER AUX TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE John Fachery TRAILER ID # 966-17 TIME LEFT JOB 1.40 LOAD 5 JOB SITE REPRESENTATIVE 14501 CARL Name Signature Deliver to facility Location: Main office: | APPLICATION AND THE ACCOMPANYING LABO | PRATORY DATA |
| Signature / Print or Type Full Name COMPANY NAME WEST CAST PHONE NO (11) 4/3-4200 ADDRESS CO. AOX 52/ SERVICE ORDER NO. CITY, STATE, ZIP 14 EVST DET PICK UP DATE 7-13-05 TRUCK TYPE: DUMP ROLL OFF OTHER TRUCK LIC. # 9 C C - 1 DRIVER NAME DAN BOUDKRAUS TRAILER LIC. # 4 DF 3 1 95 DRIVER SIGNATURE JAM FALLER TRAILER ID # 9 C C - 1 T TIME LEFT JOB 1.40 LOAD # 5 JOB SITE REPRESENTATIVE 14 SULL CARL Name Signature Deliver to facility Location: Main office: | DV 1.110A | -11 |
| COMPANY NAME WEST COAST PHONE NO (11)443-4200 D ADDRESS RO ADDRESS RO BOX 1521 SERVICE ORDER NO. CITY, STATE, ZIP LAKES DOX, A. PICK UP DATE 7-13-95 TRUCK TYPE: DUMP ROLL OFF OTHER TRUCK LIC. # 9 C 6-1 DRIVER NAME DHAN BONDK AND TRAILER LIC. # 4 DF 3195 DRIVER SIGNATURE Tohn Bankery TRAILER ID # 9 C 6-1 T TIME LEFT JOB 7:40 LOAD # 5 JOB SITE REPRESENTATIVE LIXUIT CARL Name Signature Deliver to facility Location: Main office: | Signature / Print or Tuno Full Name | DATE: 1-10 |
| ADDRESS O AOX 152 SERVICE ORDER NO. CITY, STATE, ZIP LAKES DE DE DE PICK UP DATE 7-13-95 TRUCK TYPE: DUMP ROLL OFF OTHER TRUCK LIC. # 966-1 DRIVER NAME JOHN BOUDKEAUX TRAILER LIC. # 4DF 3195 DRIVER SIGNATURE JOHN BOUDKEAUX TRAILER ID # 966-17 TIME LEFT JOB 7.40 LOAD # 5 JOB SITE REPRESENTATIVE LAKE Signature Deliver to facility Location: Main office: | Zoignature / Fillit of Type Full Name | |
| ADDRESS O AOX 152 SERVICE ORDER NO. CITY, STATE, ZIP LAKES DE DE DE PICK UP DATE 7-13-95 TRUCK TYPE: DUMP ROLL OFF OTHER TRUCK LIC. # 966-1 DRIVER NAME JOHN BOUDKEAUX TRAILER LIC. # 4DF 3195 DRIVER SIGNATURE JOHN BOUDKEAUX TRAILER ID # 966-17 TIME LEFT JOB 7.40 LOAD # 5 JOB SITE REPRESENTATIVE LAKE Signature Deliver to facility Location: Main office: | COMPANY NAME WEST GAST | PHONE NO. (11)443-4200 |
| TRUCK LIC. # POLL OF OTHER TRUCK LIC. # POLL OF OTHER TRUCK LIC. # POLL OF TRUCK ID # 966-1 DRIVER NAME DAW BOUDK, AUX TRAILER LIC. # 4DF 3195 DRIVER SIGNATURE John Brucheng TRAILER ID # 966-17 TIME LEFT JOB 1.40 LOAD Signature Deliver to facility Location: Main office: | ADDRESS RO Anx 1521 | SERVICE ORDER NO. |
| TRUCK LIC. # P74492 TRUCK ID # 966-1 DRIVER NAME JOHN BOUDKINGUY TRAILER LIC. # 4DF 3195 DRIVER SIGNATURE John Backery TRAILER ID # 966-17 TIME LEFT JOB 7:40 LOAD # 5 JOB SITE REPRESENTATIVE LAKE Signature Deliver to facility Location: Main office: | CITT, STATE, ZIP ZARUSINO | A. PICK UP DATE /-/ 3-03 |
| DRIVER NAME JOHN BOUDKEAUX TRAILER LIC. # 4DF 3195 DRIVER SIGNATURE John Bruchery TRAILER ID # 966-17 TIME LEFT JOB 1.40 LOAD # 5 JOB SITE REPRESENTATIVE LIARLE Signature Deliver to facility Location: Main office: | TRUCK TYPE: DUMPROLL OFF | OTHER |
| DRIVER NAME JOHN BOUDKEAUX TRAILER LIC. # 4DF 3195 DRIVER SIGNATURE John Bruchery TRAILER ID # 966-17 TIME LEFT JOB 1.40 LOAD # 5 JOB SITE REPRESENTATIVE LIARLE Signature Deliver to facility Location: Main office: | TRUCKUC # PAJUUSS | TRUCK ID # 9/1-1 |
| DRIVER SIGNATURE John Bauchean TRAILER ID # 966-17 TIME LEFT JOB 1.40 LOAD # 5 JOB SITE REPRESENTATIVE LAKE Signature Name Main office: | THUCKLIC.# | IRUCKID# / CO-/ |
| DRIVER SIGNATURE John Bauchean TRAILER ID # 966-17 TIME LEFT JOB 1.40 LOAD # 5 JOB SITE REPRESENTATIVE LAKE Signature Name Main office: | DRIVER NAME DUN BOUDERRUY | TRAILERLIC # 4DF 7/99 |
| JOB SITE REPRESENTATIVE LANCE Signature Deliver to facility Location: Main office: | | |
| JOB SITE REPRESENTATIVE LANCE Signature Deliver to facility Location: Main office: | DRIVER SIGNATURE John Haiche | TRAILER ID # 966-1T |
| JOB SITE REPRESENTATIVE LACIC CLARIC Signature Name Deliver to facility Location: Main office: | | |
| Name Signature Deliver to facility Location: Main office: | TIME LEFT JOB | LOAD # 5 |
| Name Signature Deliver to facility Location: Main office: | | 1 / / / / / / / / / / / / / / / / / / / |
| Deliver to facility Location: Main office: | | |
| '도둑일도보다는 도로 '(트로그림도로 모든) : 이 이 이 이 아이를 하는데 보면 TIN TIN TIN TO 나는데 모든 이 아이를 하는데 되었다. | Name | Signature |
| | | |
| | Deliver to facility Location: | Main office. |
| CANUELARIA ENVIRGINMENTAL Phone (610) 606 6207 | CANDELARIA ENVIRONMENTAL | Phone:(619) 696-6207 |
| 4001 Candelaria Lane FAX (619) 696-5117 | | |
| Anza, CA 92539 24 hr Emergency (619) 696-6207 | | |
| (951) 763-0129 | | 21 Lineigency (019) 090-0207 |

CANDELARIA ENVIRONMENTAL BIOTREATMENT FACILITY

NON-HAZARDOUS MATERIALS HAULING MANIFEST

| NAME: AC/S ENVIRONMENTAL SECUR | TIY (UST SITE 1523) |
|--------------------------------------------------------------------|--------------------------------|
| ADDRESS: P.O. BOX 555008 | PHONE NO. (760) 725-4375/43 |
| ADDRESS: P.O. BOX 555008 CITY, STATE, ZIP CAMP PENDLETON, | CA 92055 APN: 2005-36 |
| WASTE DESCRIPTION | GENERATING PROCESS UST LEAK |
| WASTE DESCRIPTION <u>NON-HAZ_SOIL</u> COMPONENTS OF WASTE (PPM) | COMPONENTS OF WASTE (PPM |
| COMPONENTS OF WASTE (PPM) | COMPONENTS OF WAGTE (TTW |
| DIESEL-IMPACTED SOIL | |
| | |
| | |
| PROPERTIES: SOLID YES | |
| HANDLING INSTRUCTIONS: WEAR APPI | ROPRIATE CLOTHING |
| | |
| BY: Signature / Print or Type Full Name | |
| - orginature 7 Transfor Type Full Name | |
| COMPANY NAME TASTERS | PHONE NO. 5/8-70 % |
| ADDRESS 990 Aster The | SERVICE ORDER NO. |
| | PICK UP DATE 7-/3-05 |
| TRUCK TYPE: DUMPROLL OFF | OTHER_ |
| TRUCK LIC. # 7/173028 | TRUCK ID # JT-/ |
| | |
| DRIVER NAME Richard Jus | TRAILER LIC. # 4FC 9689 |
| WAL | |
| DRIVER SIGNATURE | TRAILER ID # T7-77 |
| TIME LEET TOP 7:50 | 1000# |
| TIME LEFT JOB | LOAD# |
| JOB SITE REPRESENTATIVE LINUX | Ciny Children |
| Name | |
| | |
| | |
| Deliver to facility Location: | Main office: |
| CANDELARIA ENVIRONMENTAL | Phone:(619) 696-6207 |
| 4001 Candelaria Lane | FAX (619) 696-5117 |
| Anza, CA 92539 | 24 hr Emergency (619) 696-6207 |
| (951) 763-0129 | |

| | NAME: AC/S ENVIRONMENTAL SECURTLY (UST SITE 1523) |
|-----|-------------------------------------------------------------------------------------------|
| | ADDRESS P.O. BOX 555008 PHONE NO. (760) 725-4375/4321 |
| G | CITY STATE ZIP CAMP PENDLETON, CA 92055 APN: 2005-36 |
| E | |
| N | WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAK |
| E | COMPONENTS OF WASTE (PPM) COMPONENTS OF WASTE (PPM) |
| R | |
| Α | DIESEL-IMPACTED SOIL |
| T | |
| o l | 기교생님은 보고, 일반 남 하기의 시계의 회교의 사람이 가지는 그리고 있는데 이번 시계를 보는데 |
| R | PROPERTIES: SOLID YES |
| | HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING |
| - | |
| | GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON- |
| | HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE |
| | APPLICATION AND THE ACCOMPANYING LABORATORY DATA |
| | BY: Mathaniel D. Delet DATE: 7-13.05 |
| | |
| l | Signature / Print or Type Full Name |
| | COMPANY NAME RODRIGO PHONE NO. 858-922-7742 |
| н | ADDRESS 19288 RANGENT TANIES DO. SERVICE ORDER NO. |
| A | CITY, STATE, ZIP RAMONA CA 92065 PICK UP DATE 7-13-05 |
| ີ ປ | TRUCK TYPE: DUMP ROLL OFF OTHER |
| | |
| Ē | TRUCK LIC. # (P74503 TRUCK ID # HR-1 |
| R | |
| | DRIVER NAME Henry Padigo TRAILER LIC. # 90FZ68 |
| | |
| | DRIVER SIGNATURE 16 mg Malky TRAILER ID # HR-1 A |
| | |
| _ | TIME LEFT JOB 7:55 LOAD # 7 |
| P | |
| R | JOB SITE REPRESENTATIVE CHECK CARR CHECK |
| 0 | Name Signature |
| C | |
| S | Deliver to facility Location: |
| S | Deliver to facility Location: Main office: CANDELARIA ENVIRONMENTAL Phone:(619) 696-6207 |
| 0 | |
| R | |
| 11 | Anza, CA 92539 24 Temergency (619) 696-6207 |
| • | (951) 763-0129 |

| | NAME: AC/S ENVIRONMENTAL SECURTLY (UST SITE 1523) |
|--------------|--------------------------------------------------------------------------------------|
| | ADDRESS P.O. BOX 555008 PHONE NO (760) 725-4375/4321 |
| G | CITY, STATE, ZIP CAMP PENDLETON, CA 92055 APN: 2005-36 |
| E | 요즘 가는 사무를 만든 점점을 하는 것이 하는 것이 사람들 말은 것 같아 있는 것 같아 나를 받아 없다. |
| N | WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAK |
| E | COMPONENTS OF WASTE (PPM) COMPONENTS OF WASTE (PPM) |
| R A | DIESEL-IMPACTED SOIL |
| ^ | |
| 0 | |
| R | PROPERTIES: SOLID YES |
| | HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING |
| | |
| | GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON- |
| | HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE |
| | APPLICATION AND THE ACCOMPANYING LABORATORY DATA |
| . : | BY: 1 DATE: 1-13-05 |
| | Signature / Print or Type Full Name |
| Ĺ | |
| | COMPANY NAME WEST COAST R.L. SWOPHONE NO. 619 561-3903 |
| Н | ADDRESS C. Bx 1561 SERVICE ORDER NO. |
| Α | CITY, STATE, ZIP LAKOS, DO CA PICK UP DATE 7-13-05 TRUCK TYPE: DUMP ROLL OFF OTHER |
| U | MOCK THE BOWN THE |
| E | TRUCK LIC. # C > 74 494 TRUCK ID # 9 66-15 |
| R | |
| | DRIVER NAME BUL BEATY TRAILER LIC. # 1161 1394 |
| | |
| | DRIVER SIGNATURE 15 1 Seam TRAILER ID # 9 66 15-T |
| Ī | TIME LEET TOP 11:11 LAN LOAD# 8 |
| Р | TIME LEFT JOB LOAD # |
| R | JOB SITE REPRESENTATIVE |
| 0 | Name Signature |
| С | |
| E S | |
| | Deliver to facility Location: Main office: |
| S | CANDELARIA ENVIRONMENTAL Phone: (619) 696-6207 |
| R | 4001 Candelaria Lane FAX (619) 696-5117 |
| | Anza, CA 92539 24 Temergency (619) 696-6207 |
| | (951) 763-0129 |

| | NAME: AC/S ENVIRONMENTAL SECURTIY (UST SITE 1523) |
|-----|---------------------------------------------------------------------------------------------------------------------------------------|
| | ADDRESS P.O. BOX 555008 PHONE NO. (760) 725-4375/4321 |
| G | ADDRESS: P.O. BOX 555008 PHONE NO. (760) 725-4375/4321 CITY, STATE, ZIP CAMP PENDLETON, CA 92055 APN: 2005-36 |
| E | OIL, SIAIL, 2" |
| N | WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAK |
| E | COMPONENTS OF WASTE (PPM) COMPONENTS OF WASTE (PPM) |
| R | COMPONENTS OF WASTE (IT M) |
| A | DIESEL-IMPACTED SOIL |
| T | |
| 0 | |
| R | PROPERTIES: SOLID YES |
| | HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING |
| | |
| | |
| V (| GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON- |
| | HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA |
| | AFFLICATION AND THE ACCOMPANTING LABORATORY DATA |
| | BY: Askie a Delet NAMMIELD. Deleto- DATE: |
| | Signature / Print or Type Full Name |
| | |
| | COMPANY NAME BUD. 5 |
| Н | ADDRESS LAKES, U.S. SERVICE ORDER NO. |
| Α | CITY, STATE, ZIP 92900 PICK UP DATE 7-13-05 |
| U | TRUCK TYPE: DUMP_XROLL OFFOTHER |
| L | |
| Ε | TRUCK LIC. # CP 74529 TRUCK ID # 1202-T |
| R | |
| | DRIVER NAME GORDON TAMPLIN TRAILER LIC. # |
| | |
| | DRIVER SIGNATURE fordon Lampl. TRAILER ID # 1202 |
| | |
| ь. | TIME LEFT JOB 11:25 LOAD # 78 9 |
| P | 1000 0175 0500 050 070 070 070 070 070 070 070 |
| R | JOB SITE REPRESENTATIVE Trank Copies |
| 0 | Name Signatufe |
| E | |
| S | Deliver to facility Location: |
| S | Deliver to facility Location: CANDELARIA ENVIRONMENTAL Phone: (619) 696-6207 |
| 0 | 1 |
| R | |
| 11 | Anza, CA 92539 24 Temergency (619) 696-6207 |
| | (951) 763-0129 |

CANDELARIA ENVIRONMENTAL BIOTREATMENT FACILITY NON-HAZARDOUS MATERIALS HAULING MANIFEST

| NAME: AC/S ENVIRONMENTAL SECUR | TIY (UST SITE 1523) |
|--------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ADDRESS P.O. BOX 555008 | PHONE NO. (760) 725+4375/43 |
| CITY, STATE, ZIPCAMP_PENDLETON, | CA 92055 APN: 2005-36 |
| | 이용 항상 살살 살아 하는 사람들이 되었다. |
| WASTE DESCRIPTION NON-HAZ SOIL | GENERATING PROCESSUST_LEAK |
| COMPONENTS OF WASTE (PPM) | COMPONENTS OF WASTE (PPN |
| DIESEL-IMPACTED SOIL | |
| DIESEL-IMPACTED SOIL | |
| | |
| PROPERTIES: SOLID YES | |
| HANDLING INSTRUCTIONS: WEAR APPR | ROPRIATE CLOTHING |
| TIANDEING INOTITIONS. WEATTAIL! | TOT THAT I DEOTT HING |
| | |
| | S ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON- |
| HAZARDOUS, BASED ON THE INFORMATION F APPLICATION AND THE ACCOMPANYING LABO | PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANGE TO BE THE SOIL ACCEPT |
| | |
| BY: Manualid NAMMANIA | B. Delet DATE: 7/13/05 |
| Signature / Print or Type Full Name | |
| CONTRACT A CONTRACT | PHONENIA CHASAL 2CAZ |
| COMPANY NAME West Coust | PHONE NO. 614561-3903 |
| ADDRESS POBOX 1521 Lake CITY, STATE, ZIP (al 92/20) | PICK UP DATE 7-13-1)5 |
| TRUCK TYPE: DUMBA ROLL OFF | OTHER |
| MOCK THE BOMIS | |
| TRUCKLIC # CP44011 | TRUCK ID # $90-77$ |
| | |
| DRIVER NAME Peter Gores | TRAILER LIC. # 6765959 |
| A 01- | |
| DRIVER SIGNATURE LEGISLATURE | TRAILER ID # |
| 1100 | |
| TIME LEFT JOB //2/ | LOAD # |
| | ~ 101 |
| JOB SITE REPRESENTATIVE | Coples delight |
| Name | Signature |
| | |
| Deliver to facility Location: | Main office |
| Deliver to facility Location: CANDELARIA ENVIRONMENTAL | Main office: |
| 4001 Candelaria Lane | Phone:(619) 696-6207 |
| Anza, CA 92539 | FAX (619) 696-5117 |
| | 24 Temergency (619) 696-6207 |
| (951) 763-0129 | \wedge |

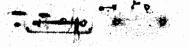
| | NAME: AC/S ENVIRONMENTAL SECURTLY (UST SITE 1523) |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | ADDRESS P.O. BOX 555008 PHONE NO (760) 725+4375/4321 |
| G | CITY, STATE, ZIP CAMP PENDLETON, CA 92055 APN: 2005-36 |
| ĒΙ | |
| N | WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAK |
| E | |
| 5 . | COMPONENTS OF WASTE (PPM) COMPONENTS OF WASTE (PPM) |
| R | DIESEL-IMPACTED SOIL |
| Α, | THE STATE OF THE S |
| L | |
| O | |
| R | PROPERTIES: SOLID YES |
| · · · · · · · · · · · · · · · · · · · | HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING |
| | |
| tel more | |
| | GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON- |
| | HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR OF THE SOIL ACCEPTANCE |
| | APPLICATION AND THE ACCOMPANYING LABORATORY DATA |
| | BY: DATE: DATE: |
| | Signature / Print or Type Full Name |
| | Signature / Print or Type Full Name |
| | COMPANY NAME JUSTES TVUKING PHONE NO. 619 518-2006 |
| | ADDRESS 970 Actor Au SERVICE ORDER NO. |
| Н | |
| Α | CITY, STATE, ZIP FICA CA 9104 PICK UP DATE 7-13-05 |
| U | TRUCK TYPE: DUMPROLL OFF OTHER |
| L | TRUCK LIC. # 7117 3028 TRUCK ID # 25-1 |
| E | TRUCK LIC. # 7 117 30 2 \(TRUCK ID # \(\) |
| R | DRIVER NAME RICHARD JUSTES TRAILER LIC. # 440 9684 |
| · • . | DRIVER NAME KICKARY JUSTES TRAILER LIC. # 470 9689 |
| • | |
| | DRIVER SIGNATURE TRAILER ID # 1-17 |
| | |
| | TIME LEFT JOB LOAD # |
| P | |
| R. | JOB SITE REPRESENTATIVE Frak Code |
| 0 | Name Signature |
| С | |
| Е | |
| E S | Deliver to facility Location: Main office: |
| S | |
| 0 | |
| R | |
| 1.1 | Anza, CA 92539 24 hr Emergency (619) 696-6207 |
| | 1 (951) 763-0129 |

| - F | |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | NAME: AC/S ENVIRONMENTAL SECURTLY (UST SITE 1523) |
| | ADDRESS: P.O. BOX 555008 PHONE NO. (760) 725-4375/4321 CITY STATE ZIP CAMP PENDLETON, CA 92055 APN 2005-36 |
| G | CITY STATE ZIP CAMP PENDLETON, CA 92055 APN: 2005-36 |
| E | |
| N | WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAK |
| E | COMPONENTS OF WASTE (PPM) COMPONENTS OF WASTE (PPM) |
| R | |
| Δ | DIESEL-IMPACTED SOIL |
| r | |
| o | |
| R | PROPERTIES: SOLID YES |
| " | HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING |
| | HANDLING INSTRUCTIONS. WEAR APPROPRIATE CLOTHING |
| | |
| | GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON- |
| | HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE |
| | APPLICATION AND THE ACCOMPANYING LABORATORY DATA |
| | |
| | BY: Detector DATE: |
| | Signature / Print or Type Full Name |
| | |
| | COMPANY NAME WEST COAST KOCK & SAND PHONE NO. 619 56 3903 |
| Н | ADDRESS P. D. Box 1521 SERVICE ORDER NO. |
| Δ | CITY, STATE, ZIP RAMONA CA 92040 PICK UP DATE 7-13-05 |
| Ω. | TRUCK TYPE: DUMP N ROLL OFF OTHER |
| Ü | |
| _ | TRUCK LIC. # 0772599 TRUCK ID # 917-45 |
| R | |
| п | DRIVER NAME Michael Ellis TRAILER LIC. # 4EV9157 |
| | |
| | DRIVER SIGNATURE Michael Elles TRAILER ID # 917-45 T |
| | THE TAXABLE TO THE TA |
| | TIME LEFT JOB LOAD # 12 |
| Ъ | TIME LEFT JOB LOAD # 12 |
| P R | 100 0175 DEDDEGENTATIVE 6 11 1 1 |
| | JOB SITE REPRESENTATIVE From Capto |
| 0 | Name Signature |
| Ü | |
| C E S | |
| | Deliver to facility Location: Main office: |
| S | CANDELARIA ENVIRONMENTAL Phone: (619) 696-6207 |
| 0 | 4001 Candelaria Lane FAX (619) 696-5117 |
| R | Anza, CA 92539 24 T Emergency (619) 696-6207 |
| | (951) 763-0129 |
| | |

NON-HAZARDOUS MATERIALS HAULING MANIFEST

| NAME: AC/S ENVIRONMENTAL SECUR | TIY (U | ST SITE 1523) | | |
|-----------------------------------------------------------------------------|-------------|------------------|------------------|-----------|
| ADDRESS: P.O. BOX 555008 CITY, STATE, ZIP CAMP PENDLETON, | 01 00055 | _ PHONE NO | (760) 725-43 | 375/4321 |
| CITY, STATE, ZIP CAMP PENDLETON, | CA 92055 | _ APN: | 2005-36 | |
| | OFNE | DATING DDOOF | 00 | |
| WASTE DESCRIPTION NON-HAZ SOIL | GENE | RATING PROCE | | (DDM) |
| OMPONENTS OF WASTE (PPM) | | COMPONE | ENTS OF WASTE | : (FFIVI) |
| DIESEL-IMPACTED SOIL | | | | |
| | | | | |
| | | | | |
| ROPERTIES: SOLID YES | | | | ì |
| IANDLING INSTRUCTIONS: WEAR APP | ROPRIATE (| CLOTHING | | |
| | | | | |
| THE DATE OF OFFICE THAT THESE WASTE | .O. ADE DOD | NON HAZADDOLK | AND CALIFORNIA | NON |
| ENERATOR CERTIFIES THAT THESE WASTE AZARDOUS, BASED ON THE INFORMATION F | | | | |
| PPLICATION AND THE ACCOMPANYING LABOR | | | TON THE GOIL AGO | LITANOL |
| 1/1/11 | | | <i>i</i> - | _ |
| SY fathamie / D. Del | 6h_ | DAT | E: 7-13-05 | |
| Signature / Print or Type Full Name | | | | |
| | | IONE NO A-C | 222-22 | |
| COMPANY NAME Rodeigo Trucking | PF | DVICE OFFERN | -922-7712 | |
| DDRESS 19288 RAMWATRAJES NA. | SE | RVICE ORDER N | 0 | |
| ITY, STATE, ZIP RAMONO CA 92665 RUCK TYPE: DUMP ROLL OFF | OTHER 7 | TO DATE 7- | -/3-03 | |
| HOCK TIPE, DOWP HOLL OFF | _OIDEN_Z | | | |
| RUCK LIC. # + 12 C874503 | ТВ | IUCK ID# /** | 401 | |
| 100K EG. 11 1851 24 1750 5 | | 100K1D# | | |
| RIVER NAME Henry Radigo | TR | AILER LIC. # 41 | DF2260 | |
| - Menty Rayings | | | 70 | |
| PRIVER SIGNATURE Keny 1949 | | TRAILER I |)# HRAT | |
| | | | | |
| IME LEFT JOB | | LOAD # 14 | | |
| | | 20/13 11 | . 0 . 1 | |
| OB SITE REPRESENTATIVE Frenk | - Cuales | 7 | 11115 | |
| Name | | Sian | ature | |
| | | | | |
| | | | | |
| Deliver to facility Location: | Main | office: | | |
| CANDELARIA ENVIRONMENTAL | | ne:(619) 696-620 | 7 | |
| 1001 Candelaria Lane | | (619) 696-5117 | | |
| Anza, CA 92539 | | Emergency (619 |) 696-6207 | , |
| (951) 763-0129 | | | | |
| (55.), (55.5) | | | | |

| NAME: AC/S ENVIRONMENTAL SECURY ADDRESS: P.O. BOX 555008 CITY STATE, ZIP CAMP PENDLETON, O | TIY (US | T SITE 1523) _ PHONE NO | (760) 725-4375/4 |
|--------------------------------------------------------------------------------------------|------------|----------------------------|----------------------|
| CITY, STATE, ZIPCAMP_PENDLETON, C | CA 92055 | _ APN: | 2005-36 |
| WASTE DESCRIPTION NON-HAZ SOIL | GENEF | RATING PROCE | SS <u>ust leak</u> |
| COMPONENTS OF WASTE (PPM) | | COMPONI | ENTS OF WASTE (PP |
| DIESEL-IMPACTED SOIL | | | |
| | | | |
| PROPERTIES: SOLID YES | | | |
| HANDLING INSTRUCTIONS: WEAR APPE | ROPRIATE C | LOTHING | |
| | | | |
| GENERATOR CERTIFIES THAT THESE WASTES HAZARDOUS, BASED ON THE INFORMATION P | | | |
| APPLICATION AND THE ACCOMPANYING LABO | | | |
| BY: plan Debt Narminis D. | Nelo L | DAT | E: 7-/3-05 |
| Signature / Print or Type Full Name | 219/2 | DA1 | |
| COMPANY NAME WEST COAST | PH | ONE NO (1/8) | 1443-4200 |
| ADDRESS P.O. Box 1521 | SEF | RVICE ORDER N | 0. |
| CITY, STATE, ZIP <u>LAKERON</u> , CA TRUCK TYPE: DUMP ROLL OFF | PIC | RVICE ORDER N K UP DATE | 7-13-05 |
| TRUCK TYPE: DUMP ROLL OFF | OTHER | | |
| TRUCK LIC. # <u>CD 74492</u> | TRU | JCK ID # 960 | 6-1 |
| DRIVER NAME JOHN BOUDERAUX | TPA | AILER LIC. # | 252105 |
| | | TELLICE #_/ | 07-0773 |
| DRIVER SIGNATURE | <u>~</u> | TRAILER I | # 966-1 T |
| TIME LEFT JOB | | LOAD # /3 | |
| IOD OUT DEDDESCRIPTION OF THE | 11 | 7 | 001 |
| JOB SITE REPRESENTATIVE Frank Name | Coples | San | atupe |
| | | Olgi I | |
| Deliver to facility Location: | Main | £4: | |
| CANDELARIA ENVIRONMENTAL | Main o | onice: e:(619) 696-620 | 7 |
| 4001 Candelaria Lane | | 619) 696-5117 | |
| Anza, CA 92539 | | mergency (619 | 696-6207 |
| (951) 763-0129 | | | $\boldsymbol{\succ}$ |



| = | |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| à | NAME: AC/S ENVIRONMENTAL SECURTLY (UST SITE 1523) ADDRESS: P.O. BOX 555008 PHONE NO. (760) 725-4375/4321 CITY, STATE, ZIP CAMP PENDLETON, CA 92055 APN: 2005-36 |
| 1 | WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAK COMPONENTS OF WASTE (PPM) COMPONENTS OF WASTE (PPM) |
| (| DIESEL-IMPACTED SOIL |
| | |
| 2 | PROPERTIES: SOLID YES HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING |
| | GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA |
| | BY: L Print or Type Full Name DATE: 7/14/05 |
| L [| |
| | COMPANY NAME (30), S PHONE NO. 619 - 561-3903 ADDRESS Lo KAS, U.Z. (n. SERVICE ORDER NO. |
| | CITY, STATE, ZIP 92040 PICK UP DATE 7-14-05 |
| | TRUCK TYPE: DUMP > ROLL OFF OTHER |
| | TRUCK LIC. # (P 74 529 TRUCK ID # 1202 |
| | DRIVER NAME GODDON THIMPH. IN TRAILER LIC. # NEW |
| | DRIVER SIGNATURE TRAILER ID # 1202 T |
| | TIME LEFT JOB 7:30 AV LOAD # 15 |
| | JOB SITE REPRESENTATIVE |
| | Name Signature |
| | Deliver to facility Location: CANDELARIA ENVIRONMENTAL 4001 Candelaria Lane Main office: Phone:(619) 696-6207 FAX (619) 696-5117 |
| | Anza, CA 92539 24 m Emergency (619) 696-6207 |
| | (951) 763-0129 |

CANDELARIA ENVIRONMENTAL BIOTREATMENT FACILITY NON-HAZARDOUS MATERIALS HAULING MANIFEST

| NAME: AC/S ENVIRONMENTAL SECURT ADDRESS: P.O. BOX 555008 CITY, STATE, ZIP CAMP PENDLETON, C | | _ PHONE NO | (760) 725- 2005-: | 4375/432 36 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------------------|---------------------------------------|----------------|
| WASTE DESCRIPTION | GENER | ATING PRO COMPO | CESS <u>ust le</u> DNENTS OF WAS | STE (PPM) |
| PROPERTIES: SOLID <u>YES</u> HANDLING INSTRUCTIONS: WEAR APPRO | OPRIATE CI | OTHING | | |
| GENERATOR CERTIFIES THAT THESE WASTES HAZARDOUS, BASED ON THE INFORMATION PRAPPLICATION AND THE ACCOMPANYING LABOR BY: BY: Repaire And The Paragram Signature / Print or Type Full Name | ROVIDED BY RATORY DAT | THE GENERA A | OUS, AND CALIFOR FOR ON THE SOIL I | ACCEPTANCI |
| COMPANY NAME WEST COAST ADDRESS P.O. BOX 1521 CITY, STATE, ZIP LAKESIUR TRUCK TYPE: DUMP PROLL OFF | SEF | IVICE ORDEF | 19) 442-42 RNO. 7-14-05 | ' <i>0</i> 0 |
| TRUCK LIC. #_ <u>CP74492</u> | TRU | ICK ID# | 966-1 | |
| DRIVER NAME JOHN BOUDREAUX DRIVER SIGNATURE John Brush | | | 40K319 RID# <u>966</u> - | |
| TIME LEFT JOB | | LOAD# | 16 | |
| JOB SITE REPRESENTATIVEName | | Z | fgnature | |
| Deliver to facility Location: CANDELARIA ENVIRONMENTAL 4001 Candelaria Lane Anza, CA 92539 (951) 763-0129 | FAX (| e:(619) 696-6 619) 696-51 | | AC |

CANDELARIA ENVIRONMENTAL

BIOTREATMENT FACILITY NON-HAZARDOUS MATERIALS HAULING MANIFEST

| NAME: AC/S ENVIRONMENTAL SECURT ADDRESS: P.O. BOX 555008 | The second secon | SITE 1523 | 4-4-5- | -4375/43 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-------------------------------------|--------------|
| CITY, STATE, ZIP CAMP PENDLETON, C | CA 92055 | PHONE NO. APN: | 2005-3 | 36 |
| WASTE DESCRIPTION <u>NON-HAZ SOIL</u> COMPONENTS OF WASTE (PPM) | | | ESS <u>UST</u> LEANENTS OF WAS | |
| DIESEL-IMPACTED SOIL | | | | |
| PROPERTIES: SOLID <u>YES</u> HANDLING INSTRUCTIONS: WEAR APPRI | ROPRIATE CLO | OTHING | | |
| GENERATOR CERTIFIES THAT THESE WASTES HAZARDOUS, BASED ON THE INFORMATION PRAPPLICATION AND THE ACCOMPANYING LABOR BY: Signature / Print or Type Full Name | ROVIDED BY TI PRATORY DATA | HE GENERAT(\ | US, AND CALIFOR OR ON THE SOIL A | CCEPTAN |
| COMPANY NAME BUS ADDRESS PO BOX CITY, STATE, ZIP LAKESIDE, CA TRUCK TYPE: DUMP X ROLL OFF | PHOI SERV PICK OTHER | NE NO. /6 /0 /ICE ORDER I UP DATE | 561-390 NO. 7/14/05 | 5 |
| TRUCK LIC. # | | - CK ID #/ | 1201 | |
| DRIVER NAME MICHOS 1 SHACK Lan | TRAIL | ER LIC. # | TEMP (NOW |) |
| DRIVER SIGNATURE My Show | M | TRAILER | ID# 123/ | - |
| TIME LEFT JOB | 1 | OAD # | 7 | |
| JOB SITE REPRESENTATIVEName | | Sig | nature | |
| Deliver to facility Location: CANDELARIA ENVIRONMENTAL 4001 Candelaria Lane | FAX (61 | (619) 696-62 19) 696-5117 | | L |
| Anza, CA 92539 (951) 763-0129 | | nergency (61 | | |

CANDELARIA ENVIRONMENTAL

MARKET THE STATE OF THE STATE OF

BIOTREATMENT FACILITY NON-HAZARDOUS MATERIALS HAULING MANIFEST

| NAME: AC/S ENVIRONMENTAL SECURT ADDRESS: P.O. BOX 555008 CITY STATE, ZIP CAMP PENDLETON, C | |
|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| WASTE DESCRIPTION NON-HAZ SOIL COMPONENTS OF WASTE (PPM) | GENERATING PROCESS <u>UST LEAK</u> COMPONENTS OF WASTE (PPM) |
| DIESEL-IMPACTED SOIL | |
| PROPERTIES: SOLID YES HANDLING INSTRUCTIONS: WEAR APPROPERTIES | OPRIATE CLOTHING |
| | |
| COMPANY NAME MMI ADDRESS 15898 OUT they so CITY, STATE, ZIP EL CATON, CA TRUCK TYPE: DUMP X ROLL OFF | PHONE NO. SERVICE ORDER NO. PICK UP DATE 7-14-05 OTHER |
| TRUCK LIC. # 7055019 | TRUCK ID # 209. |
| DRIVER NAME (COB. TOTALSON | TRAILER LIC. # 4681972 |
| DRIVER SIGNATURE JULY MILLER | TRAILER ID # 2897 |
| TIME LEFT JOB 800 | LOAD # 18 |
| JOB SITE REPRESENTATIVEName | Signature |
| Deliver to facility Location: CANDELARIA ENVIRONMENTAL 4001 Candelaria Lane Anza, CA 92539 (951) 763-0129 | Main office: Phone:(619) 696-6207 FAX (619) 696-5117 24 hr Emergency (619) 696-6207 |

CANDELARIA ENVIRONMENTAL BIOTREATMENT FACILITY NON-HAZARDOUS MATERIALS HAULING MANIFEST

| | NAME: AC/S ENVIRONMENTAL SECURTLY (UST SITE 1523) |
|-----|---------------------------------------------------------------------------------------------------------------|
| | ADDRESS: P.O. BOX 555008 PHONE NO. (760) 725-4375/4321 |
| G | ADDRESS: P.O. BOX 555008 PHONE NO. (760) 725-4375/4321 CITY, STATE, ZIP CAMP PENDLETON, CA 92055 APN: 2005-36 |
| E | |
| N | WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAK |
| E | COMPONENTS OF WASTE (PPM) COMPONENTS OF WASTE (PPM) |
| R | |
| Α | DIESEL-IMPACTED SOIL |
| T | |
| 0 | |
| R | PROPERTIES: SOLID YES |
| | HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING |
| | |
| | GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON- |
| | HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE |
| | APPLICATION AND THE ACCOMPANYING LABORATORY DATA |
| | BY: K BUL MIN BOIPOIN DATE: 2/14/45 |
| | Signature / Print or Type Full Name |
| ļ | |
| | COMPANY NAME Mountain Menterial SHONENO. 390 9932 |
| н | ADDRESS OID SERVICE ORDER NO. |
| Α | CITY, STATE, ZIP Lo Leside Ca 92029 PICK UP DATE 7-14-05 |
| U | TRUCK TYPE: DUMP TT_ ROLL OFFOTHER |
| L | |
| E | TRUCK LIC. # 7/0 22 388 TRUCK ID # 207 |
| R | DRIVER NAME AND Marchause TRAILER LIC. # 200 4/FM/289 |
| | DRIVER NAME Hour Moorhouse TRAILER LIC. # 2- 4/FM6789 |
| - A | DRIVER SIGNATURE An Mochurae TRAILER ID # 2017 |
| | British Grant Total And Trose Course |
| | TIME LEFT JOB 8:10 LOAD # 19 |
| Р | 2000# |
| R | JOB SITE REPRESENTATIVE |
| 0 | Name Signature |
| С | |
| E | |
| S | Deliver to facility Location: Main office: |
| S | CANDELARIA ENVIRONMENTAL Phone:(619) 696-6207 |
| 0 | 4001 Candelaria Lane FAX (619) 696-5117 // |
| R | Anza, CA 92539 24 hr Emergency (619) 696-6207 |
| | (951) 763-0129 |
| | 1 . The spin spin of the state of i , the spin of the spin of i . We have i |

CANDELARIA ENVIRONMENTAL BIOTREATMENT FACILITY NON-HAZARDOUS MATERIALS HAULING MANIFEST

| | NAME: AC/S ENVIRONMENTAL SECURTLY (UST SITE 1523) | |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| | ADDRESS: P.O. BOX 555008 PHONE NO. (760 |) 725-4375/4321 |
| G | CAMP DENDIETON CA 02055 | 2005-36 |
| Ē | F 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | |
| N | | CT TRAV |
| Εl | TO THE STATE OF TH | OF WASTE (PPM) |
| R | | SI VVAOTE (ITTIVI) |
| Δ | DIESEL-IMPACTED SOIL | |
| ^ | | |
| 0 | | |
| R | | |
| | THOI EITHEO. GOLD | |
| | HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING | |
| | | |
| | GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND C | CALIFORNIA NON- |
| . 1 | HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON TH | |
| | APPLICATION AND THE ACCOMPANYING LABORATORY DATA | |
| | 1/2 | In the |
| | BY: 16 Bet Kim Beyorm DATE: 71 | 14/03 |
| | Signature / Print or Type Full Name | |
| | | 100 11- |
| | COMPANY NAME BUD, S PHONE NO (619) 9 | 143-4200 |
| Н | H ADDRESS A SERVICE ORDER NO. | |
| Α | A CITY, STATE, ZIP 92040 PICK UP DATE 7-/ | 4-05 |
| U | U TRUCK TYPE: DUMP ROLL OFF OTHER | |
| L | | |
| Е | TRUCK LIC. # <u>CP74529</u> TRUCK ID # 1202 | |
| R | \mathbf{R} | |
| | DRIVER NAME GODDON TRANSPORT TRAILER LIC. # | |
| | | |
| | DRIVER SIGNATURE TRAILER ID # /2 | 2021 |
| | | |
| | TIME LEFT JOB LOAD # | |
| Р | | |
| R | | |
| 0 | | |
| | | |
| Ē | E - | |
| C E S | S Deliver to facility Location: Main office: | |
| S | | 110 |
| 0 | | NH |
| R | P 1 1 1 1 1 1 1 1 1 | |
| 11 | 24 Enlegency (019) 090-0 | 207 |
| | (951) 763-0129 | |
| | | |

CANDELARIA ENVIRONMENTAL

BIOTREATMENT FACILITY NON-HAZARDOUS MATERIALS HAULING MANIFEST

| NAME: AC/S ENVIRONMENTAL SECUR | TIY (US | ST SITE 1523 |) | |
|------------------------------------------------------------|------------|---------------------------|--------------------|--------------|
| ADDRESS P.O. BOX 555008 CITY, STATE, ZIP CAMP PENDLETON. | CA DOORE | _ PHONE NO. | (760) 725 2005- | +4375/4321 |
| CITY, STATE, ZIP CAMP PENDLETON, | CA 92033 | _ APN: | 2003 | 30 |
| WASTE DESCRIPTION NON-HAZ SOIL | GENE | RATING PROC | FSS | |
| COMPONENTS OF WASTE (PPM.) | GLINLI | COMPON | IENTS OF WAS | STE (PPM) |
| | | | | |
| DIESEL-IMPACTED SOIL | | | | |
| | | · · | | |
| <u>보기 : 보통 : 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 </u> | | | | |
| PROPERTIES: SOLID YES | 20001475.6 | | | |
| HANDLING INSTRUCTIONS: WEAR APPE | HOPHIATE | LOTHING | | |
| GENERATOR CERTIFIES THAT THESE WASTES | S ADE DODA | NONLHAZARDOL | IS AND CALIEDE | ONIA NON- |
| HAZARDOUS, BASED ON THE INFORMATION P | | | | |
| APPLICATION AND THE ACCOMPANYING LABO | DRATORY DA | ITA | | |
| BY: 1 Bet Kin Borg. | Ox | . | TE: 7/14/6 | |
| Signature / Print or Type Full Name | | UA | 1E. ////* | |
| | | | | |
| COMPANY NAME Bus | PH | IONE NO. 6'9 |) 561 . 39 | 25 |
| ADDRESS RUBOX 152 | SE DIG | RVICE ORDER | 00 - 44 | |
| CITY, STATE, ZIP / AKESIDE CA TRUCK TYPE: DUMP ROLL OFF | OTHER | CK UP DATE | 114/05 | |
| THOOK THE BOWN A HOLL OF | OTTILIT | | | |
| TRUCK LIC. # | TR | UCK ID# | 201 | |
| | | | | |
| DRIVER NAME MICHO/ GACILLO | TR. | AILER LIC. # | 1cmp - N | /cw |
| DRIVER SIGNATURE MU MAL | | | ID# 120) | |
| DITIVEIT GIGINATORIE JAM | 7 | INAILEN | 120) | |
| TIME LEFT JOB /2:15 / | | LOAD# | 7 / | |
| | | | 7 | |
| JOB SITE REPRESENTATIVE | | | | |
| Name | | ✓ Sig⊓ | nature | |
| | | | | |
| Deliver to facility Location: | Main | office: | | |
| CANDELARIA ENVIRONMENTAL | | onice ie:(619) 696-620 | 07 | \mathbf{j} |
| 4001 Candelaria Lane | | (619) 696-5117 | | 1/// |
| Anza, CA 92539 | | Emergency (61 | | 11 |
| (951) 763-0129 | | | | |
| | | | \sim | |

CANDELARIA ENVIRONMENTAL

BIOTREATMENT FACILITY NON-HAZARDOUS MATERIALS HAULING MANIFEST

| NAME: AC/S ENVIRONMENTAL SECURTI ADDRESS: P.O. BOX 555008 CITY, STATE, ZIP CAMP PENDLETON, CA | PHONE NO. (760) 725-4375/4 |
|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CITY, STATE, ZIP CAMP PENDLETON, CA | 92055 APN: 2005-36 |
| WASTE DESCRIPTION NON-HAZ SOIL | _ GENERATING PROCESSUST_LEAK |
| COMPONENTS OF WASTE (PPM) | COMPONENTS OF WASTE (PPI |
| DIESEL-IMPACTED SOIL | |
| | |
| PROPERTIES: SOLID YES | |
| HANDLING INSTRUCTIONS: WEAR APPROPRIES | PRIATE CLOTHING |
| | |
| | |
| Signature / Print or Type Full Name | |
| COMPANYMANT | BIONE NO 2 SOLD THE STATE OF TH |
| | PHONE NO. (619)443-4200 SERVICE ORDER NO. |
| ADDRESS P.O. BOX 1521 CITY, STATE, ZIP LAKESIOK, CA | |
| | OTHER |
| | |
| TRUCK LIC. #_ CP74492 | TRUCK ID # 966-/ |
| DRIVER NAME JOHN BOUDEERUX | TRAILER LIC. # 40x3195 |
| DRIVER SIGNATURE Journal | TRAILER ID # 966-17 |
| TIME LEFT JOB | LOAD# 22 |
| IOR SITE DEDDESCRITATIVE | |
| JOB SITE REPRESENTATIVEName | Ognatura |
| ivalile a | <i>(</i> ≸gnåture |
| Deliver to facility Location: | Main office: |
| CANDELARIA ENVIRONMENTAL | Phone:(619) 696-6207 |
| 4001 Candelaria Lane | FAX (619) 696-5117 |
| Anza, CA 92539 | 24 hr Emergency (619) 696-6207 |
| | _ · · · · · · · · · · · · · · · · · · · |

CANDELARIA ENVIRONMENTAL BIOTREATMENT FACILITY NON-HAZARDOUS MATERIALS HAVEING MANIFEST

| 4321 |
|------------|
| |
| 7 |
| |
| PM) |
| |
| |
| |
| |
| |
| |
| |
| |
| N- ANCE |
| TITOL |
| , |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| 1, |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| 1.40 |
| 1 |
| |

Date Weighed

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

| $A \cap A \cap$ |
|-------------------------------------------------------------------------|
| Weighed For: A Covinne Generator |
| APN: 05-36 Manifest No. 41245 |
| Carrier: West Wast |
| Truck License No |
| Truck Trailer No. |
| Commodity: Non-Hazardous Soil/Material |
| WEIGHTS: []GROSS: 36.20 |
| []TARE: 12.98 |
| NET TONS: 23-22 |
| Candelaria Environmental - Weighmaster Gross & Tare |
| By: Tyme hub Deputy |
| (h-12-0) |



WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

| Delivered To & Weighed At: |
|--------------------------------------------------------|
| Candelaria Environmental - Weighmaster |
| 4001 Candelaria Lane |
| Anza, California 92539 |
| 909-763-0129 |
| Weighed For: AS Environmental |
| APN: 53 (Manifest No. 4/124/ |
| B 1: 79//15 |
| Carrier: 166-15 |
| Truck License No. |
| Truck Trailer No. 7 ECA384 |
| |
| Commodity: Non-Hazardous Soil/Material |
| WEIGHTS: [] GROSS: 39-22 |
| []TARE: 34.84 |
| 142 |
| NET TONS: 41.30 |
| Candelaria Environmental - Weighmaster Gross & Tare |
| By: Lyme Muhn |
| Deputy |

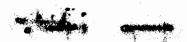


WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

| AC /S E STORY |
|--------------------------------------------------------|
| Weighed For: 4 Senerato |
| APN: OS-36 Manifest No. |
| Carrier: West Cost 917-27 |
| Truck License No. CP460// |
| Truck Trailer No. 67659 |
| Commodity: Non-Hazardous Soil/Material |
| WEIGHTS: [] GROSS: 37.83 |
| []TARE: 14.3/ |
| NET TONS: 23.52 |
| Candelaria Environmental - Weighmaster Gross & Tare |
| By: Deputy |
| |



Date Weighed

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

| Weighed For: AC/S Environmental |
|------------------------------------------|
| APN: 05-3 (Manifest No. 4/243 Generator |
| Carrier: West Coast 917-45 |
| Truck License No. CP 72599 |
| Truck Trailer No. 4 9 9 5 7 |
| Commodity: Non-Hazardous Soil/Material |
| 280. |
| WEIGHTS: [] GROSS: |
| [] TARE: 2.76 |
| NET TONS: 26.04 |
| Candelaria Environmental - Weighmaster |
| Gross & Tare |
| By: Deputy |

Deputy

Date Weighed

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

| Candelaria Environmental - Weighmaster 4001 Candelaria Lane |
|----------------------------------------------------------------|
| Anza, California 92539 |
| 909-763-0129 |
| Weighed For: 45 Environmental |
| APN: 05-36 Manifest No. 41244 |
| Carrier: B. ds 966-1 |
| Truck License No. 7449 |
| Truck Trailer No. 4DF 3145 |
| Commodity: Non-Hazardous Soil/Material |
| WEIGHTS: []GROSS: 3/84 |
| []TARE: 14.35 |
| NET TONS: 23.54 |
| Candelaria Environmental - Weighmaster |



Delivered To & Weighed At:

19107

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Candelaria Environmental - Weighmaster 4001 Candelaria Lane Anza, California 92539 909-763-0129 Weighed For: Manifest No. Carrier: _ Truck License No. Truck Trailer No. Commodity: Non-Hazardous Soil/Material **WEIGHTS:**] GROSS: [] TARE: **NET TONS:** Candelaria Environmental - Weighmaster Gross & Tare By: _

Date Weighed

12

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

| 10/60 |
|---------------------------------------------------------|
| Weighed For: Thurmont |
| APN: Manifest No.41246 |
| Carrier: Loc(1)0 HR-/ |
| Truck License No. 2753 |
| Truck Trailer No. 4D+2268 |
| Commodity: Non-Hazardous Soil/Material |
| WEIGHTS: [] GROSS: 39.02 |
| [] TARE: 15-35 |
| NET TONS: 23.67 |
| Candelaria Environmental - Weighmaster Gross & Tare By: |
| Deputy |

Date Weighed

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

| Weighed For: HC/S ENUIV |
|--------------------------------------------------------|
| APN: 05-36 Manifest No. 41747 |
| Carrier: 13uda 966 |
| Truck License No. CPRY497 |
| Truck Trailer No. 484394 |
| Commodity: Non-Hazardous Soil/Material |
| WEIGHTS: [] GROSS: 394) |
| []TARE: 1484 |
| NET TONS: 24.63 |
| Candelaria Environmental - Weighmaster Gross & Tare |
| 7-13-05 Deputy |

Date Weighed

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Candelaria Environmental - Weighmaster 4001 Candelaria Lane Anza, California 92539 909-763-0129

NoloThic

| Weighed For: HUSENUIV |
|----------------------------------------------------------------------------------|
| APN: 05-36 Manifest No. 41248 Generator |
| Carrier: Bud 122 |
| Truck License No. CP74529 |
| Truck Trailer No. |
| Commodity: Non-Hazardous Soil/Material WEIGHTS: [] GROSS: 33.41 [] TARE: 72.49 |
| Candelaria Environmental - Weighmaster Gross & Tare By: Deputy |



Date Weighed

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

| Weighed For: AUS Enviv |
|------------------------------------------------------------------|
| APN: 25-36 Manifest No. 4749 |
| Carrier: Buds 917-27 |
| Truck License No. CP4601). |
| Truck Trailer No. 65959 |
| WEIGHTS: [] GROSS: 379 [] TARE: 143 [NET TONS: 23.60 |
| Candelaria Environmental - Weighmaster Gross & Tare By: 7-13-2 |

Date Weighed

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

| Weighed For: HC/S LhUIV |
|----------------------------------------|
| APN: 0531 Manifest No. 3175 |
| Carrier: JUSTERS ANGOTI |
| Truck License No. 7m73028 |
| Truck Trailer No. 4F C9684 |
| Commodity: Non-Hazardous Soil/Material |
| WEIGHTS: [] GROSS: |
| []TARE: 1435 |
| NET TONS: 26.29 |
| Candelaria Environmental - Weighmaster |
| Gross & Tare By: |
| Deputy |

Date Weighed

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

| Weighed For: HCIS Envir |
|---------------------------------------------------------|
| APN: 95-36 Manifest No. 4175 |
| Carrier: Buch 917-45 |
| Truck License No. CP72549 |
| Truck Trailer No. UE-M9157 |
| Commodity: Non-Hazardous Soil/Material |
| WEIGHTS: [] GROSS: 40.57 |
| [] TARE: 1276 |
| NET TONS: 2781 |
| Candelaria Environmental - Weighmaster Gross & Tare By: |
| 7-13-2 |

Date Weighed

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

| Weighed For: ITUS ENUM |
|----------------------------------------|
| APN: 9536 Manifest No. 41252 |
| Carrier: Kadriga MARIA |
| Truck License No |
| Truck Trailer No. LIDF7768 |
| Commodity: Non-Hazardous Soil/Material |
| WEIGHTS: []GROSS: 38.04 |
| [] TARE: /5.35 |
| NET TONS: 7769 |
| Candelaria Environmental - Weighmaster |
| Gross & Tare By: |
| Deputy |

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Candelaria Environmental - Weighmaster 4001 Candelaria Lane Anza, California 92539 909-763-0129

1-1-5

| Weighed For: 1+45 Enuiv |
|-------------------------------------------------------------------------------------------------|
| APN: 0.536 Manifest No. 0.21253 |
| Carrier: <u>Burb</u> 966-1 |
| Truck License No. CP7449 |
| Truck Trailer NoLIDE3195 |
| Commodity: Non-Hazardous Soil/Material WEIGHTS: [] GROSS: 39,48 [] TARE: 143 NET TONS: 25.78 |
| Candelaria Environmental - Weighmaster Gross & Tare By: Deputy |

Date Weighed

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Candelaria Environmental - Weighmaster 4001 Candelaria Lane Anza, California 92539 909-763-0129

Aclo Tours

| Weighed For: HUS ENVIS Senerator |
|--------------------------------------------------------|
| APN: 05 Manifest No. 1/254 |
| Carrier: 120 |
| Truck License No. CP7452 3 |
| Truck Trailer No. NEW |
| Commodity: Non-Hazardous Soil/Material |
| WEIGHTS: [] GROSS: 35.8 |
| [] TARE: 12.98 |
| NET TONS: 2284 |
| Candelaria Environmental - Weighmaster Gross & Tare |
| By: |
| 7-14-2 |



WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

| Weighed For: AUS ENVISE |
|---------------------------------------------------------|
| APN: 05-36 Manifest No. 4/255 |
| Carrier: <u>8485</u> 966-1 |
| Truck License No. CP74492 |
| Truck Trailer No. 4DF3195 |
| / Commodity: Non-Hazardous Soil/Material |
| WEIGHTS: []GROSS: 39,78 |
| []TARE: 14,30 |
| NET TONS: 25.48 |
| Candelaria Environmental - Weighmaster Gross & Tare By: |
| 7-14-0) |
| NET TONS: Z5.48 Candelaria Environmental - Weighmaster |



WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

| Weighed For: AC/S ENVIR. |
|---------------------------------------------------------------|
| APN: 05-36 Manifest No. 4/256 |
| Carrier: WEST COAST 1701 |
| Truck License No. CP74524 |
| Truck Trailer No. VEW |
| Commodity: Non-Hazardous Soil/Material |
| WEIGHTS: [] GROSS: 37,98 |
| []TARE: 17.68 |
| NET TONS: 25.33 |
| Candelaria Environmental - Weighmaster Gross & Tare By: |
| 7-14-05 Date Weighed |

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

| Weighed For: A SENUIYS Generator |
|-----------------------------------------------------------------------------------------------------|
| APN:05-36 Manifest No. 4/257 |
| Carrier: MOUNTAIN MAT. 209 |
| Truck License No. 7455019 |
| Truck Trailer No. 4GB/972 |
| Commodity: Non-Hazardous Soil/Material WEIGHTS: [] GROSS: 39, 32 [] TARE: 1455 NET TONS: 29.77 |
| Candelaria Environmental - Weighmaster Gross & Tare By: Deputy Date Weighed |



THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

| Weighed For: AC/S ENVIR SEC_ Generator |
|--------------------------------------------------------|
| APN: 05-36 Manifest No. 4/258 |
| Carrier: MOUNTAIN MAT. 207 |
| Truck License No. 7/22388 |
| Truck Trailer No. 4FM 6789 |
| Commodity: Non-Hazardous Soil/Material |
| WEIGHTS: [] GROSS: 39.53 |
| []TARE: /Z.76 |
| NET TONS: 26-77 |
| Candelaria Environmental - Weighmaster Gross & Tare |
| 7-14-05 Deputy |



WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

| Weighed For: AC/5 ENVIR. 5EC. |
|---------------------------------------------------------|
| APN: 05-36 Manifest No. 4/259 |
| Carrier: WCST COAST 120 |
| Truck License No. CP74529 |
| Truck Trailer No. WEW |
| Commodity: Non-Hazardous Soil/Material |
| WEIGHTS: [] GROSS: 35.82 |
| []TARE: 12,98 |
| NET TONS: 22.89 |
| Candelaria Environmental - Weighmaster Gross & Tare By: |
| 7-14-05 |



WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

| Weighed For: 2 | AC/S EN | VIR. SEC. |
|---------------------------------------|-----------------------|----------------|
| APN: 05- | 36 Manife | est No. 4/260 |
| Carrier: WEST | TCOAST | 1201 |
| Truck License N | No. CP74. | 524 |
| Truck Trailer No | oNE | W |
| | ommodity: Non-Hazardo | |
| WEIGHTS: | []GROSS: _ | 33.90 |
| | TARE: _ | 12.68 |
| · | NET TONS: _ | 21,22 |
| Candelaria Env Gross & Tare By: | rironmental - W | |
| | | 7-14-05 Deputy |

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

| Weighed For: AC/S ENVIR. SEC. | erator |
|--------------------------------------------------------|--------|
| APN: 05-36 Manifest No. 4/26/ | · |
| Carrier: WEST COAST 966-1 | |
| Truck License No | |
| Truck Trailer No. 4DF3/95 | |
| Commodity: Non-Hazardous Soil/Material | |
| WEIGHTS: [] GROSS: 37.66 | · |
| []TARE: 14,30 | |
| NET TONS: 23.36 | |
| Candelaria Environmental - Weighmaster Gross & Tare | |
| 7-14-05 | Deputy |

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

| Weighed For: 17C/S ENVIR, SEC. |
|--------------------------------------------------------|
| APN: 05-36 Manifest No. |
| Carrier: MOUNTAIN 209 |
| Truck License No. 7/55019 |
| Truck Trailer No. 4G01972 |
| Commodity: Non-Hazardous Soil/Material |
| WEIGHTS: [] GROSS: 36,44 |
| []TARE: 14,55 |
| NET TONS: 21.89 |
| Candelaria Environmental - Weighmaster Gross & Tare |
| 7-14-05 Deputy |
| Date Weighed |



THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

| Weighed For: AC/S ENVIR. SEC. |
|--------------------------------------------------------|
| APN: 05-36 Manifest No. 4/263 |
| Carrier: MOUNTAIN MAT. |
| Truck License No. 7PZZ388 |
| Truck Trailer No. 4FM6789 |
| Commodity: Non-Hazardous Soil/Material |
| WEIGHTS: []GROSS: 40.83 |
| []TARE: 12.76 |
| NET TONS: 28.07 |
| Candelaria Environmental - Weighmaster Gross & Tare |
| 7-14-05 Deputy |

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

| Weighed For: HUS KNIP Je |
|--------------------------------------------------------|
| APN: 05-36 Manifest No. 41264 |
| Carrier: Compelle 1 Sun |
| Truck License No. UP31635 |
| Truck Trailer No. LIA U6702 |
| Commodity: Non-Hazardous Soil/Material |
| WEIGHTS: []GROSS: 49.52 |
| [] TARE: 15.73 |
| NET TONS: 3379. |
| Candelaria Environmental - Weighmaster Gross & Tare |
| By: tunno Muslime. |
| 2-15-0\ Deputy |
| Date Weighed |